Our ref: 14-12-2021

14-12-2021 By hand

**Environmental Protection Department** 

**Environmental Assessment Division** 

Metro Assessment Group

Kowloon Section (2)

27th floor, Southorn Centre,

130 Hennessy Road,

Wan Chai, Hong Kong

(Attn: Mr. TANG Ho Him, Matthew)

Dear Mr. TANG,

#### Contract No. EDO 15/2018

Environmental Monitoring Works for Contract No. ED/2018/01 – Kai Tak Development – Stage 4 infrastructure at the Former Runway and South Apron

Submission of Monthly EM&A Report for November 2021

I refer to the Environment Permit (EP) No. EP-337/2009 and EP-445/2013/A for the captioned project.

Pursuant to Condition 3.3 of the EP-337/2009 and Condition of the 3.2 of the EP-445/2013/A, please find enclosed four hard copies and one electronic copy of Monthly EM&A Report for November 2021, which has been verified by the IEC for your reference.

Thank you very much for your attention and please feel free to contact Mr. Lee at 2618 2166 should you require further information.

Yours faithfully,

For and on behalf of

Ka Shing Management Consultant Limited

#### AKCL

Applied knowledge center limited

**Company Secretary** 

# **Environmental Monitoring and Audit Report for**

Contract No. ED/2018/01 –

Kai Tak Development – Stage 4 infrastructure at the former runway and south apron

Contract No.: EDO 15/2018

November 2021

(Version 1.0)

Certified By: (Environmental Team Leader)



Ref.: CEDKTDS4EM00\_0\_0199L.21

13 December 2021

By Post and Email

AECOM Asia Company Limited 8/F, Grand Central Plaza, Tower 2 138 Shatin Rural Committee Road Shatin, Hong Kong

Attention: Mr. Clive Cheng

Dear Sir,

Re: Contract No. ED/2018/01 – Kai Tak Development Stage 4 Infrastructure at the Former Runway and South Apron

#### **Monthly EM&A Report for November 2021**

Reference is made to the Environmental Team's submission of the Monthly EM&A Report for November 2021 (Version 1.0) certified by the ET Leader and provided to us via email on 11 December 2021.

Please be informed that we have no adverse comment on the captioned submission. We hereby verify the captioned submission in accordance with Condition 3.3 of EP-337/2009 and Condition 3.2 of EP-445/2013/A.

Thank you for your attention. Please do not hesitate to contact the undersigned should you have any queries.

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited



Y H Hui

Independent Environmental Checker

c.c.

**CEDD** 

Attn.: Mr. Alex Wong

Fax: 2739 0076

Ka Shing

Attn.: Mr. Chan Pang

By email

Penta-Ocean

Attn.: Mr. Daniel Ho

Fax: 2572 4080

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#### **EXECUTIVE SUMMARY**

This is the 23<sup>rd</sup> Monthly Environmental Monitoring & Audit (EM&A) report which summaries the findings of the EM&A Programme during the reporting period from 1 to 30 November 2021.

#### **Breaches of Action and Limit Levels**

- 1. 1-hour TSP monitoring was conducted as scheduled in the reporting month. No Action/Limit Level exceedance was recorded.
- 2. 24-hour TSP monitoring was conducted as scheduled in the reporting month. No Action/Limit Level exceedance was recorded.
- 3. Construction noise monitoring was conducted as scheduled in the reporting month. No Action/Limit Level exceedance was recorded.
- 4. Summary of the non-compliance in the reporting month for the Project is tabulated in Table I.

Table I Non-compliance Record in the Reporting Month

Parameter	No. of Ex	Action Taken	
Parameter	Action Level	Limit Level	Action Taken
1-hr TSP	0	0	N/A
24-hr TSP	0	0	N/A
Construction noise	0	0	N/A

#### **Complaint log**

5. No complaint was received in the reporting month. Summary of complaints in the reporting month is tabulated in Table II.

Table II Summary of complaints in the Reporting Month

Date of complaint received	Date of complaint	Description of complaint	Investigation / Recommendations / Action take	Close-out date / Status
No complaint	NA	NA	NA	NA

Date of complaint received	Date of complaint	Description of complaint	Investigation / Recommendations / Action take	Close-out date / Status
was received in the reporting month.				

#### Notifications of summons and successful prosecutions

6. No notification of summons and successful prosecutions was received in the reporting month. Summary of summons and successful prosecutions in the reporting month is tabulated in Table III.

Table III Summary of summons and successful prosecutions in the Reporting Month

Date of receiving notification of summons or prosecutions	Date of event	Description of event	Action take	Close-out date / Status
No notification	NA	NA	NA	NA
of summons and				
successful				
prosecutions were				
received in				
the reporting				
month.				

#### Report changes

7. There was no reporting change in the reporting month.

#### **Key construction works in the reporting month**

8. Major construction activities undertake during the reporting month included:

- North Approach Ramp Construction of wall, roof slab, utilities trough
- Bridge D3 Construction of Abutment, Pier, Bridge Deck
- North Depressed Road Construction of wall & top slab
- Underpass Dismantle waling & strut and excavation at formation level / Construction of base slab, wall and roof slab
- South Approach Ramp Construction of Permanent Structure
- District Cooling System seawater intake box culvert Construction of cofferdam and box structure
- Noise barrier Erection of steel working and PMMA panel/ road and drainage works /Dismantle of working platform
- Lift 3 –Construction of Wall and Roof Slab / Installation of Steelworks and Glass Panel / Road and drainage works/ Installation of lift and earthwork
- Lift 4 Water Pipe Diversion / Construction of Lift Shaft / Construction Wall and Roof Slab
- South Depressed Road Installation of sheet pile / wailing & strut for the cofferdam / excavation at formation level
- Rising Main and Water Pipe ELS works / Laying
- Landscaped Deck Construction of pile caps
- Transformer Room Sheet pile installation / Installation of wailing & strut for the cofferdam / Pre-drilling works
- Road D3 Junction –Road works
- Lift 1 &2 -Sheet pile installation/ Installation of waling of street for cofferdam / Footing construction

#### **Future key issues**

9. The future key issues and potential impact in the coming month are given in Table IV.

Table IV Summary of future key issues and potential impact in the coming month

Future key issues in the coming month	Potential impact
North Approach Ramp – Construction of wall, roof slab, utilities trough	Noise and Air Quality, Chemical and Waste Management
Bridge D3 – Construction of Abutment, Pier, Bridge Deck	Noise and Air Quality, Landscape and Visual
North Depressed Road – Construction of wall & top slab / Sheet pile extraction	Noise and Air Quality, Chemical and Waste Management
Underpass – Dismantle waling & strut and excavation at formation level / Construction of base slab, wall and roof slab	Noise and Air Quality, Chemical and Waste Management
South Approach Ramp – Construction of Permanent Structure	Noise and Air Quality, Chemical and Waste Management
District Cooling System seawater intake box culvert - Construction of cofferdam and box structure/ Reinstatement of the existing seawall/ Removal of ELS/ Installation of feeder pipes/ Construction of inspection shaft/ Installation of cool steel works	Noise, Air and Water Quality

Future key issues in the coming month	Potential impact
Noise barrier – Erection of steel working and PMMA panel/	Noise and Air Quality, Landscape
road and drainage works/ Dismantle of working platform	and Visual
Lift 3 –Installation of lift and earthwork	Noise and Air Quality, Chemical and Waste Management
Lift 4 –Construction of Wall and Roof Slab / Installation of Steelworks and Glass Panel	Noise, Air and Water Quality
South Depressed Road – Installation of sheet pile / wailing &	Noise and Air Quality, Chemical
strut for the cofferdam / excavation at formation level	and Waste Management
Rising Main and Water Pipe – ELS works / Laying	Noise, Air and Water Quality
Landscaped Deck – Construction of pile caps	Noise, Air and Water Quality
Transformer Room –Installation of wailing & strut for the cofferdam/ Construction of Permanent Structure	Noise, Air and Water Quality
Road D3 Junction –Road works	Noise, Air and Water Quality
Lift 1 &2- Sheet pile installation/ Installation of waling of	Noise and Air Quality, Chemical
street for cofferdam / Footing construction	and Waste Management

#### 1. INTRODUCTION

#### **Project Background**

- 1.1 The Kai Tak Development (KTD) is located in the south-eastern part of Kowloon Peninsula of the HKSAR, comprising the apron and runway areas of the former Kai Tak Airport and existing waterfront areas at To Kwa Wan, Ma Tau Kok, Kowloon Bay, Kwun Tong and Cha Kwo Ling.
- 1.2 Contract No. ED/2018/01 Kai Tak Development stage 4 infrastructure at the former runway and south apron (The Project), comprises mainly the design and construction of a dual two- lane Road D3 (Metro Park Section), a single 2-lane Road L12d, a salt water pumping station, a sewage pumping station, landscaped deck and promenade above and adjoining Road D3 (Metro Park Section) respectively, some remaining road works at Road L14, noise barrier at Road D3A, and other associated works at the former runway and south apron. The proposed works are shown in Figure 1 and Figure 2. During the course of the Contract No. ED/2018/01, there may be modification of noise barriers in association with the construction of footbridges connecting to the landscaped deck of Road D3A by developers of adjacent lands (Figure 3). The proposed works and site boundary are shown in Figure 4.
- 1.3 Civil Engineering and Development Department (CEDD) had completed an Environmental Impact Assessment (EIA) and is the Permit Holder.
- 1.4 The construction work under ED/2018/01 comprises the EM&A Manuals (EIA Register Nos. AEIAR-130/2009 for Kai Tak Development and EIA Register Nos. AEIAR-170/2013 for Roads D3A and D4A) and Environmental Permit (EP) Nos. EP-337/2009, EP-445/2013 and Variation to the EP (VEP) No. EP-445/2013/A.
- 1.5 Air quality and noise monitoring has been proposed in the EM&A Manual with EIA Register Nos. AEIAR-130/2009 for Kai Tak Development while no air quality and noise monitoring are proposed in EM&A Manual with EIA Register Nos. AEIAR-170/2013 for Roads D3A and D4A.

#### **Project Organization**

1.6 The project organization chart and with respect to the EM&A programme is shown in Appendix A. Information of key personnel contact names and telephone numbers are summarized in Table 1.1.

Table 1.1 Contact Information of Key Personnel

Party	Role	Contact Person	Position	Phone No.	Fax No.
Civil Engineering and	Project	Mr. Alex Wong	Senior Engineer	3579 2452	2739 0076
Development Department (CEDD)	Proponent	Ms. Chan Ka Yan	Engineer	3579 2458	2739 0076
AECOM Asia Co. Ltd. (AECOM)	Supervisor (act as Engineers' Representative (ER) listed in EM&A Manual)	Mr. Clive Cheng	CRE	3911 4201	3911 4288
Ramboll Hong Kong Limited (Ramboll)	Independent Environmental Checker (IEC)	Mr. Y H Hui	IEC	3465 2850	3465 2899
Ka Shing Management Consultant Limited (Ka Shing)	Environmental Team (ET)	Mr. Chan Pang	ET Leader	6082 2973	2120 7752
Penta-Ocean Construction Co., Ltd. (Penta-Ocean)	Contractor	Mr. Lulu Mar	Environmental Officer	6845 0626	3465 8898

#### **Works Area and Construction Programme**

1.7 The construction works commenced on 20 January 2020. The construction programme of the Project is given in Appendix B.

#### Construction works undertaken during reporting month

1.8 Major construction works of the Project in the reporting month are summarized in Table 1.2:

Table 1.2 Major activities of the Project during reporting month

North Approach Ramp – Construction of wall,	Bridge D3 – Construction of Abutment, Pier,			
roof slab, utilities trough	Bridge Deck			
North Depressed Road – Construction of wall & top slab	Underpass – Dismantle waling & strut and excavation at formation level / Construction of base slab, wall and roof slab			
South Approach Ramp – Construction of Permanent Structure	District Cooling System seawater intake box culvert – Construction of cofferdam and box structure			
	Lift 3 – Construction of Wall and Roof Slab /			
Noise barrier – Erection of steel working and PMMA panel/ road and drainage works/	Installation of Steelworks and Glass Panel/ Road			
Dismantle of working platform	and drainage works/ Installation of lift and			
Distinctive of working plantering	earthwork			
Lift 4 – Water Pipe Diversion/ Construction of Lift Shaft /Construction Wall and Roof Slab	South Depressed Road – Installation of sheet pile / wailing & strut for the cofferdam / excavation at formation level			
Landscaped Deck – Construction of pile caps	Transformer Room –Sheet pile installation/			
	Pre-drilling works			
	Lift 1 &2 -Sheet pile installation/ Installation of			
Road D3 Junction –Road works	waling of street for cofferdam / Footing			
	construction			
Rising Main and Water Pipe – ELS works / Laying				

#### **Submission Status under the Environmental Permits**

1.9 The status of required submission under Environmental Permit (EP) conditions under EP-337/2009, EP-445/2013 and Variation to the EP (VEP) No. EP-445/2013/A are summarized in Table 1.3.

Table 1.3 Summary of Status of Required Submission of EPs

EP Condition	EP Condition	EP Condition	Submission	Submission
EP-337/2009	EP-445/2013	EP-445/2013/A		Date
Condition 1.11	Condition 1.12	Condition 1.12	Notification of Commencement Date of Construction of the Project	6 Jan 2020

EP Condition EP-337/2009	EP Condition EP-445/2013	EP Condition EP-445/2013/A	Submission	Submission Date
Condition 2.3	Condition 2.3	Condition 2.3	Management Organization of Main Construction Companies	9 Sep 2019
Condition 2.3	Condition 2.3	Condition 2.3	Updated Management Organization of Main Construction Companies	17 Aug 2021
Condition 2.4	Condition 2.4	Condition 2.4	Design Drawings	6 Jan 2020
Condition 2.11	Condition 2.5	Condition 2.5	Landscape Mitigation Plans	13 Nov 2020
Condition 2.1	Condition 2.5	Condition 2.5	Landscape Mitigation Plans (Revision 2)	18 May 2021
Condition 3.2	NA	NA	Baseline Monitoring Report	2 Jan 2020
Condition 3.2	NA	NA	Revised Baseline Monitoring Report	28 Mar 2020
Condition 3.3	Condition 3.2	Condition 3.2	Monthly EM&A Report (October 2021)	10 Nov 2021

#### 2. AIR QUALITY MONITORING

#### **Monitoring Requirements**

2.1 In accordance with EM&A Manuals (EIA Register Nos. AEIAR-130/2009), impact air quality monitoring shall be carried out during the construction phase of the Project. For regular impact monitoring, a sampling frequency of at least once in every six says will be strictly observed at all of the monitoring stations for 24-hour TSP. For 1-hour TSP monitoring, the sampling frequency of at least three times in every six days will be undertaken when the highest dust impact occurs.

#### **Monitoring Locations**

2.2 Three designated monitoring stations were selected for air quality monitoring programme. Impact air quality monitoring was conducted at three air quality monitoring stations in the reporting month. Table 2.1 describes the air quality monitoring locations, which are also depicted in Figure 5.

Table 2.1 Locations of Air Quality Monitoring Stations

Air Quality Monitoring Locations for the Project	Location of Measurement
AM3 - Sky Tower	Podium floor near T7
AM4(A) - The Hong Kong Society for the Blind's	Rooftop
Factory cum Sheltered Workshop	Koonop
AM7 – Hong Kong Children's Hospital	Rooftop

#### **Monitoring Parameters, Frequency and Duration**

2.3 The air quality monitoring locations and monitoring frequency are listed in Table 2.2.

*Table 2.2 Air Quality Monitoring Parameters, Frequency and Duration* 

Air Monitoring Station	Location for Measurement	Parameter	Duration	Frequency
AM3 - Sky Tower	Podium floor near T7			
AM4(A) - The Hong Kong Society for the Blind's Factory cum	Rooftop	- 24-hour average TSP	- 24 hours - 1 hour	- Once every 6 days
Sheltered Workshop AM7 - Hong Kong Children's Hospital	Rooftop	average TSP	- i noui	every 6 days

- 2.4 The monitoring schedule for reporting month and next month is presented in Appendix C.
- 2.5 Photographic records of the impact monitoring setup are shown in Appendix D.

#### **Monitoring Equipment**

2.6 24-hour average TSP and 1-hour average TSP levels were measured for impact monitoring.
24-hour average TSP levels were measured by the High Volume Samplers (HVS) and 1-hour average TSP levels were measured by direct reading method to indicate short-term impacts.
Wind data monitoring equipment was set up at conspicuous locations for logging wind speed and wind direction near to the dust monitoring locations. Table 2.3 summarizes the equipment to be used in the air quality monitoring.

Table 2.3 Air Quality Monitoring Equipment

Equipment	Model	Quantity
HVS Sampler	TE-5170 X c/w of TSP sampling inlet	3
Calibrator	TISCH TE-5025A	1
1-hour TSP Dust Meter	TSI Model AM510 SidePak Personal Aerosol Monitor	2
Wind Anemometer	Davis Vantage Pro2 Weather Station	1

- 2.7 High volume samplers (HVS) (TE-5170 X c/w of TSP sampling inlet) comprising with appropriate sampling inlets were employed for 24-hour TSP monitoring. The sampler was composed of a motor, a filter holder, a flow controller and a sampling inlet and its performance specification complied with that required by USEPA Standard Title 40, Code of Federation Regulations Chapter 1 (Part 50).
- 2.8 Calibration certificates, catalogue of equipment are given in Appendix E.

#### Monitoring Methodology and QA/QC Procedure

#### 24-hour TSP Monitoring

#### Operating/Analytical Procedures

- 2.9 Setup criteria of HVS are shown as follows:
  - A horizontal platform with appropriate support to secure the samplers against gusty wind was provided.
  - No two samplers were placed less than 2m apart.
  - The distance between the sampler and an obstacle, such as buildings, was at least twice the height that the obstacle protrudes above the sampler.
  - A minimum of 2m of separation from walls, parapets and penthouses was set for the rooftop samples.
  - A minimum of 2m separation from any supporting structure, measured horizontally was set.
  - No furnaces or incineration flues was nearby.
  - Airflow around the sampler was unrestricted.
  - Any wire fence and gate, to protect the samplers, was not caused any obstruction during monitoring.
  - Permission were obtained to setup the samplers and to obtain access to the monitoring stations.
  - A secured supply of electricity was provided to operate the samplers.
- 2.10 Prior to the commencement of the dust sampling, the flow rate of the HVS was properly set (between 1.1 m<sup>3</sup>/min. and 1.7 m<sup>3</sup>/min.) in accordance with the manufacturer's instruction to within the range recommended in USEPA Standard Title 40, CFR Part 50.
- 2.11 For TSP sampling, Glass Fiber Filter Media 8" x 10" have a collection efficiency of > 99 % for particles of 0.3 μm diameter were used.
- 2.12 The power supply was checked to ensure the sampler worked properly and then placed any filter media at the designated air monitoring station.

- 2.13 The filter holding frame was removed by loosening the four nuts and a weighted and conditioned filter was carefully centered with the stamped number upwards, on a supporting screen.
- 2.14 The filter was aligned on the screen so that the gasket formed an airtight seal on the outer edges of the filter. Then the filter holding frame was tightened to the filter holder with swing bolts. The applied pressure was sufficient to avoid air leakage at the edges.
- 2.15 The shelter lid was closed and secured with the aluminium strip.
- 2.16 The timer was programmed. Information was recorded on the record sheet, which included the starting time, the weather condition and the filter number (the initial weight of the filter paper can be found out by using the filter number).
- 2.17 After sampling, the filter was removed from the HVS and put into a clean and labeled seal plastic bag to avoid cross contamination. The elapsed time was also be recorded. The sampled filters were sent to the HOKLAS accredited or other internationally accredited laboratory for weighting.

#### Maintenance/Calibration

- 2.18 The following maintenance/calibration are required for the HVS:
  - The HVS and their accessories were properly maintained. Appropriate maintenance such
    as routine motor brushes replacement and electrical wiring checking were made to ensure
    that the equipment and necessary power supply are in good working condition.
  - High volume samplers were calibrated with at bi-monthly intervals using TE-5025A
     Calibration Kit throughout all stages of the air quality monitoring.

#### 1-hour TSP Monitoring

#### Measurement Procedures

- 2.19 The measurement procedures of the 1-hour TSP were conducted in accordance with the Manufacturer's Instruction Manual as follows:
  - Set up the dust meter on a tripod at 1.2m level.
  - Turned on the dust meter and check the battery, if too low, change new ones. Pointed the meter to the source area or the planned measurement area.

- The zero calibration of the instrument was conducted before and after each sampling.
- TSP levels were recorded for 1-hour with 5-minute data logging interval.
- Recorded down the general meteorological conditions, Test ID no., start/end time, spot check reading at each sampling location for data processing.
- Recorded any activities that may generate dust during measurement period.

#### Maintenance/Calibration

- 2.20 The following maintenance/calibration are required for the direct dust meters:
  - To validity the accuracy of dust meter, compare the results measured by dust meter and HVS by direct reading method every 12 months throughout all stages of the air quality monitoring.

#### **Wind Data Monitoring**

- 2.21 Wind Anemometer was installed at the roof-top of AM7 Hong Kong Children's Hospital with 10m above ground and clear of constructions or turbulence caused by the buildings.
- 2.22 The wind data was captured by a data logger and the data was downloaded at least once per month for analysis.
- 2.23 The wind data monitoring equipment will be re-calibrated at least once every six months.
- 2.24 Wind direction is divided into 16 sectors of 22.5 degrees each.
- 2.25 Details of weather information during the monitoring period are shown in Appendix F.

#### **Action and Limit Levels**

2.26 The Action and Limit Levels of 24-hour average TSP and 1-hour average TSP are summarized in Table 2.4 and Table 2.5 respectively.

Table 2.4 Action and Limit Levels of 24-hour average TSP for Construction Dust Monitoring

Parameter	Air Monitoring Station	Action Level, µg/m <sup>3</sup>	Limit Level, µg/m <sup>3</sup>
	AM3	182	260
24-hour average TSP	AM4(A)	187	260
	AM7	181	260

Table 2.5 Action and Limit Levels of 1-hour average TSP for Construction Dust Monitoring

Parameter	Air Monitoring Station	Action Level, μg/m <sup>3</sup>	Limit Level, μg/m <sup>3</sup>
	AM3	297	500
1-hour average TSP	AM4(A)	326	500
	AM7	315	500

#### **Impact Air Quality Monitoring results**

2.27 Impact monitoring results for 24-hour average TSP and 1-hour average TSP levels at the designed air quality monitoring stations are summarized in Table 2.6 and Table 2.7 respectively.

Table 2.6 Summary of 24-hour average TSP Monitoring Data during the reporting month

Air Monitoring Station	Average TSP Concentration, µg/m <sup>3</sup>	Range, µg/m <sup>3</sup>	Action Level, μg/m <sup>3</sup>	Limit Level, μg/m <sup>3</sup>
AM3	74	58 - 82	182	260
AM4(A)	83	71 – 96	187	260
AM7	68	58 – 85	181	260

<u>Table 2.7 Summary of 1-hour average TSP Monitoring Data during the reporting month</u>

Air Monitoring Station	Average TSP Concentration, µg/m <sup>3</sup>	Range, μg/m <sup>3</sup>	Action Level, μg/m <sup>3</sup>	Limit Level, μg/m <sup>3</sup>
AM3	55	42 - 65	297	500
AM4(A)	62	47 – 77	326	500
AM7	50	38 - 60	315	500

- 2.28 There was no Action and Limit Level exceedance of 24-hour average TSP and 1-hour average TSP levels recorded during the reporting month.
- 2.29 Graphical presentation and detailed monitoring results of 24-hour average TSP and 1-hour average TSP levels are shown in Appendix G and Appendix H respectively.

- 2.30 The Event and Action Plan is provided in Appendix I.
- 2.31 Non-project related construction activities in the adjacent construction sites were observed during the reporting period and may affect the monitoring results.

#### 3. NOISE MONITORING

#### **Monitoring Requirements**

- 3.1 In accordance with EM&A Manuals (EIA Register Nos. AEIAR-130/2009), impact noise monitoring shall be carried out during the construction phase of the Project.
- 3.2 Regular monitoring,  $L_{Aeq, 30\text{-minute}}$ , for each station will be on a weekly basis and conduct one set of measurements between 0700 1900 on normal weekdays.
- 3.3 If construction works are extended to include works during 1900 0700 as well as public holidays and Sundays, additional weekly impact monitoring will be carried out during the respective restricted hours periods.

#### **Monitoring Locations**

3.4 Two designated monitoring stations were selected for noise monitoring programme. Impact noise monitoring was conducted at two noise monitoring stations in the reporting month. Table3.1 describes the noise monitoring locations, which are also depicted in Figure 6.

*Table 3.1 Locations of Noise Monitoring Stations* 

Noise Monitoring Locations for the Project	Location of Measurement
M11 - The Hong Kong Society for the Blind's Factory cum Sheltered Workshop	Rooftop (Façade)
M12 - Hong Kong Children's Hospital	Rooftop (Façade)

#### **Monitoring Parameters, Frequency and Duration**

3.5 The noise monitoring locations and monitoring frequency are listed in Table 3.2.

Table 3.2 Noise Monitoring Parameters, Frequency and Duration

Noise Monitoring Station	Location for Measurement	Parameter	Frequency and Duration
M11 - The Hong Kong Society for the Blind's Factory cum Sheltered Workshop	Rooftop (Façade)	$L_{ ext{Aeq},}L_{ ext{A10}}$ and $L_{ ext{A90}}$	30 - minutes measurement at each monitoring station between 0700 – 1900 hrs on normal weekdays (Monday to Saturday) at
M12 - Hong Kong Children's Hospital	Rooftop (Façade)		frequency of once per week.

- 3.6 The monitoring schedule for reporting month and next month is presented in Appendix C.
- 3.7 Photographic records of the monitoring setup are shown in Appendix D.

#### **Monitoring Equipment**

3.8 As referred to in the Technical Memorandum (TM) issued under the Noise Control Ordinance (NCO), sound level meters in compliance with the IEC 61672-1 (Type 1) standard [this standard replaced the International Electrotechnical Commission Publications 60651:1979 (Type 1) and 60804:1985 (Type 1)] were used for noise monitoring. Table 3.3 summarizes the equipment to be used in the noise monitoring.

Table 3.3 Noise Monitoring Equipment

Equipment	Model	Quantity
Sound Level Meter	RION NL52	2
Sound Level Calibrator	RION NC 74	1
Sound Level Calibrator	RION NC 75	1
Air Flowmeter	TSI TA440 Air Velocity	2

3.9 Calibration certificates, catalogue of equipment are given in Appendix J.

#### Monitoring Methodology and QA/QC Procedure

- 3.10 The noise level measurement was conducted at 1m from the exterior of the nearby noise sensitive receivers building façade and at 1.2m above the ground and facing to the source area or the planned measurement area.
- 3.11 No noise measurement was conducted in the presence of fog, rain, wind with a steady speed

exceeding 5 m/s or wind with gusts exceeding 10 m/s. Air flow was measured by air flow meter.

- 3.12 Turned on the sound level meter and check the battery, if too low, change new ones.
- 3.13 Calibration was conducted immediately prior to and after each noise measurement, the accuracy of the sound level meters was checked by using sound calibrator generating 1,000 Hz with 94dB. Measurement data was found to be valid only if the calibration levels from before and after the noise measurement agreed to within 1.0 dB.
- 3.14 Noise level was recorded.
- 3.15 Recorded any activities that may generate noise during measurement period.

#### **Maintenance and Calibration**

- 3.16 The microphone head of the sound level meter and calibrator was cleaned with a soft cloth at quarterly intervals.
- 3.17 The sound level meter and sound calibrator were calibrated annually.
- 3.18 Calibration for sound level meter was conducted immediately prior to and following each noise measurement by using sound calibrator generating a known sound pressure level at a known frequency (1,000 Hz with 94dB). Measurements may be accepted as valid only if the calibration levels from before and after the noise measurement agree to within 1.0 dB.

#### **Action and Limit Levels**

3.19 The Baseline Noise Levels and Action and Limit Levels for construction noise is presented in Table 3.4.

Table 3.4 Baseline Noise Level and Action and Limit Levels for Construction Noise Monitoring

Time Period	Noise Monitoring Station	Baseline Noise Levels, dB (A)	Action Level	Limit Level ^
0700 – 1900 on	M11	68.3	When one documented	75 dB(A)
normal weekdays	M12	61.9	complaint is received.	75 GD(A)

Note: ^ If works are to be carried out during restricted hours, the conditions stipulated in the Construction Noise Permit (CNP) issued by the Noise Control Authority have to be followed.

#### **Impact Noise Monitoring results**

3.20 Impact noise monitoring results at the designed noise monitoring stations are summarized in Table 3.5 respectively.

Table 3.5 Summary of Noise Monitoring Data during the reporting month

Noise Monitoring Station	Measured L <sub>Aeq, 30-min</sub> , Average, dB(A)	Measured L <sub>Aeq, 30-min</sub> , Range, dB(A)	Action Level	Limit Level ^
M11	67.2	65.5 – 68.4	When one documented	75
M12	64.4	60.9 – 65.7	complaint is received	dB(A)

Note: ^ If works are to be carried out during restricted hours, the conditions stipulated in the Construction Noise Permit (CNP) issued by the Noise Control Authority have to be followed.

- 3.21 There were no action level exceedance of noise monitoring and limit level exceedance of  $L_{\text{Aeq}}$ ,  $_{30\text{min}}$  recorded during the reporting month.
- 3.22 Graphical presentation and detailed monitoring results are shown in Appendix K.
- 3.23 The Event and Action Plan is provided in Appendix L.
- 3.24 Non-project related construction activities in the adjacent construction sites were observed during the reporting period and may affect the monitoring results.

### 4. COMPARISON OF EM&A RESULTS WITH EIA

#### **PREDICTIONS**

4.1 The environmental impacts predictions were given in Agreement No. CE 35/2006(CE) Kai Tak Development Engineering Study cum Design and Construction of Advance Works - Investigation, Design and Construction - Kai Tak Development Environmental Impact Assessment Report, EIA Register Nos. AEIAR-130/2009 for Kai Tak Development (The EIA Report). The EM&A data was compared with the EIA predictions as summarized in Table 4.1 to Table 4.3.

Table 4.1 Comparison of 24-hour average TSP Monitoring Data with EIA predictions

		Predicted Cumulative Maximum 24-hour average TSP concentration		Measured 24-hr average TSP in
Air Monitoring Station	ASR No. in EIA report	Scenario 1 (Mid 2009 to	Scenario 2 (Mid 2013 to	Reporting Month (November 2021)
		Mid 2013), μg/m <sup>3</sup>	Late 2016), μg/m <sup>3</sup>	μg/m <sup>3</sup>
AM3 - Sky Tower	A40^	106	138	58 - 82
AM4(A) - The Hong Kong Society for the Blind's Factory cum Sheltered Workshop	A43^	123	195	71 – 96
AM7 – Hong Kong Children's Hospital	PA60	NA	NA	58 – 85

Note:

Table 4.2 Comparison of 1-hour average TSP Monitoring Data with EIA predictions

		Predicted Cumulative Maximum		
		1-hour average TSP		Measured 1-hr
	ASR No. in	concentration		average TSP in
Air Monitoring Station		Scenario 1	Scenario 2	Reporting Month
	EIA report	(Mid 2009 to	(Mid 2013 to	(November 2021)
		Mid 2013),	Late 2016),	$\mu g/m^3$
		$\mu g/m^3$	$\mu g/m^3$	
AM3 - Sky Tower	A40	217^	247^	42 - 65
AM4(A) - The Hong Kong				
Society for the Blind's Factory	A43	283^	409^	47 - 77
cum Sheltered Workshop				
AM7 – Hong Kong Children's	PA60	NA	NA	38 – 60
Hospital	1A00	INA	INA	30 – 00

Note:

<sup>^</sup> Prediction results are given in the Table 3.13 of the EIA report EIA Register Nos. AEIAR-130/2009 for Kai Tak Development.

<sup>^</sup> Prediction results are given in the Table 3.13 of the EIA report EIA Register Nos. AEIAR-130/2009 for Kai Tak Development.

Table 4.3 Comparison of Noise Monitoring Data with EIA predictions

Noise Monitoring Station	NSR No. in EIA report	Predicted Mitigated Construction Noise Levels during Normal Daytime Working Hour L <sub>Aeq, 30min</sub> , dB(A)	Measured Noise Level in Reporting Month (November 2021) L <sub>Aeq, 30min</sub> , dB(A)
M11 - The Hong Kong Society for the Blind's Factory cum Sheltered Workshop	N18	50 – 76*	65.5 – 68.4
M12 - Hong Kong Children's Hospital	PN83, PN84, PN84A	NA	60.9 – 65.7

#### Note:

- 4.2 24-hour TSP monitoring results at AM3 and AM4(A) were recorded lower than the prediction in the EIA Report. Non-project related construction activities in the adjacent construction sites were observed during the reporting period and may affect the monitoring results.
- 4.3 No prediction in the EIA Report for 24-hour TSP monitoring results at AM7.
- 4.4 1-hour TSP monitoring results at AM3 and AM4(A) were recorded lower than the prediction in the EIA Report.
- 4.5 No prediction in the EIA Report for 1-hour TSP monitoring results at AM7.
- 4.6 Noise monitoring results at M11 were recorded lower than the prediction in the EIA Report.
- 4.7 No prediction in the EIA Report for noise monitoring results at M12.

<sup>\*</sup> Prediction results are given in the Table 3.20 of the EIA report EIA Register Nos. AEIAR-130/2009 for Kai Tak Development.

#### 5. LANDSCAPE AND VISUAL MONITORING

5.1 In accordance with EM&A Manuals (EIA Register Nos. AEIAR-130/2009 and AEIAR-170/2013), Landscape and Visual Monitoring shall be carried out during the construction phase of the Project. Regular impact monitoring will be conducted at least once per week.

#### **Results and Observations**

- 5.2 Site inspections were carried out on a weekly basis to monitor the timely implementation of proper environmental management practices and mitigation measures in the Project site.
- 5.3 Site inspections were conducted on 4, 11, 18 and 25 November 2021 in the reporting month.
- 5.4 The summaries of site audits are attached in Table 5.1.

Table 5.1 Summary of observations of Landscape and Visual impact during the reporting month

Inspection Date	Key Observations	Recommendations / Actions	Close-out Date / Status
04 November 2021	No	NA	NA
11 November 2021	No	NA	NA
18 November 2021	No	NA	NA
25 November 2021	No	NA	NA

- 5.5 No non-compliance of the landscape and visual impact was recorded in the reporting month.
- 5.6 Should non-compliance of the landscape and visual impact occur, action in accordance with the action plan presented in Appendix M shall be performed.

#### 6. ENVIRONMENTAL SITE INSPECTION AND AUDIT

#### **Site Inspection**

- 6.1 Site inspections were carried out on a weekly basis to monitor the timely implementation of proper environmental management practices and mitigation measures in the Project site.
- 6.2 Site inspections were conducted on 4, 11, 18 and 25 November 2021 in the reporting month.
- 6.3 The summaries of site audits are attached in Table 6.1.

Table 6.1 Summary of site inspections observations during the reporting month

Inspection Date	Key Observations	Recommendations / Actions	Close-out Date / Status
04 November	Observation:  Dust suppression should be enforced traffic road to reduce dust nuisance.	Action Taken: Dust suppression has been forced traffic road to reduce dust nuisance.	Closed-out on 11 November 2021
2021	Observation: The accumulated waste should be removed.	Action Taken: The accumulated waste has been removed.	Closed-out on 11 November 2021
11	NA	NA	
November 2021			NA
18 November 2021	NA	NA	NA

Inspection Date	Key Observations	Recommendations / Actions	Close-out Date / Status
25 November 2021	Observation: The NRMM label of the generator should be shown in proper colour.	Action Taken: The NRMM label of the generator have been replaced its proper colour.	Closed-out on 2 December 2021

#### **Status of Waste Management**

- 6.4 The amount of wastes generated by the major site activities of the work contracts within the Project during the reporting month is shown in Appendix N.
- 6.5 The Contractor was registered as a chemical waste producer for the Project. The Contractor was reminded that chemical waste containers should be properly treated and stored temporarily in designated chemical waste storage area on site in accordance with the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes.

#### Status of Environmental Licenses, Notification and Permits

6.6 A summary of the relevant permits, licenses and/or notifications on environmental protection for the Project is shown in Table 6.2.

Table 6.2 Summary of Environmental Licenses, Notifications and Permits

Tuote of Summary of Sitting that Decembers, 140 tipe cultions which I commende				
Environmental Licenses, Notifications and Permits	Ref. No.	Valid Form	Valid Till	
	EP-337/2009	23 Apr 2009	N/A	
Environmental Permit under EIAO	EP-445/2013	3 May 2013	N/A	
	EP-445/2013/A	13 Aug 2014	N/A	
Construction Dust Notification under APCO	445956	6 June 2019	N/A	
Wastewater Discharge License under WPCO	WT00034610-2019	26 Sep 2019	30 Sep 2024	
Waste Disposal Billing Account	7034450	28 June 2019	N/A	
Registration as a Chemical Waste Producer	5218-286-P3182-03	18 Jul 2019	N/A	
Construction Noise Permit	GW-RE0522-21	02 Jun 2021	01 Dec 2021	

Environmental Licenses, Notifications and Permits	Ref. No.	Valid Form	Valid Till
	GW-RE0528-21	11 Jun 2021	10 Dec 2021
	GW-RE0540-21	12 Jun 2021	11 Dec 2021
	GW-RE0893-21	24 Sep 2021	19 Mar 2022
	GW-RE0960-21	05 Oct 2021	03 Apr 2022
	GW-RE1054-21	27 Oct 2021	13 Apr 2022

#### **Implementation Status of Environmental Mitigation Measures**

- 6.7 The Contractor has implemented environmental mitigation measures and requires as stated in the EIA reports, the EP and the EM&A Manuals. The implementation status of the mitigation measures during the reporting month is summarized in Appendix O.
- 6.8 In response to the site audit findings, the Contractor carried out corrective actions with summary given in Appendix O.

#### **Environmental Complaint and Non-compliance**

6.9 No complaint was received in the reporting month. Summary of complaints in the reporting month is tabulated in Table 6.3.

Table 6.3 Summary of complaints in the Reporting Month

Date of complaint received	Date of complaint	Description of complaint	Investigation / Recommendations / Action take	Close-out date / Status
No complaint was received in the reporting month.	NA	NA	NA	NA

6.10 Complaint log and Complaint Investigation report are shown in Appendix P.

#### **Notifications of summons and successful prosecutions**

6.11 No notification of summons and successful prosecutions was received in the reporting month. Summary of summons and successful prosecutions in the reporting month is tabulated in Table 6.4.

Table 6.4 Summary of summons and successful prosecutions in the Reporting Month

Date of receiving notification of summons or prosecutions	Date of event	Description of event	Action take	Close-out date / Status
No notification of summons and successful prosecutions were received in	NA	NA	NA	NA
the reporting month.				

6.12 The summaries of cumulative environmental complaint, warning, summon and notification of successful prosecution for the Project is presented in Appendix P.

#### 7. FUTURE KEY ISSUES

#### **Construction Programme in the coming month**

7.1 The major construction activities and potential impacts in the next reporting month as follow:

Table 7.1 Summary of future key issues and potential impact in the coming month

	_
Future key issues in the coming month	Potential impact
North Approach Ramp - Construction of wall, roof slab,	Noise and Air Quality, Chemical
utilities trough	and Waste Management
Bridge D3 – Construction of Abutment, Pier, Bridge Deck	Noise and Air Quality, Landscape
Bridge D5 – Collstruction of Aduthent, Flet, Bridge Deck	and Visual
North Depressed Road – Construction of wall & top slab /	Noise and Air Quality, Chemical
Sheet pile extraction	and Waste Management
Underpass – Dismantle waling & strut and excavation at	Noise and Air Quality, Chemical
formation level / Construction of base slab, wall and roof slab	and Waste Management
South Approach Damp Construction of Darmanant Structure	Noise and Air Quality, Chemical
South Approach Ramp – Construction of Permanent Structure	and Waste Management

Future key issues in the coming month	Potential impact
District Cooling System seawater intake box culvert - Construction of cofferdam and box structure/ Reinstatement of the existing seawall/ Removal of ELS/ Installation of feeder pipes/ Construction of inspection shaft/ Installation of cool steel works	Noise, Air and Water Quality
Noise barrier – Erection of steel working and PMMA panel/	Noise and Air Quality, Landscape
road and drainage works/ Dismantle of working platform	and Visual
Lift 3 –Installation of lift and earthwork	Noise and Air Quality, Chemical and Waste Management
Lift 4 –Construction of Wall and Roof Slab / Installation of Steelworks and Glass Panel	Noise, Air and Water Quality
South Depressed Road – Installation of sheet pile / wailing &	Noise and Air Quality, Chemical
strut for the cofferdam / excavation at formation level	and Waste Management
Rising Main and Water Pipe – ELS works / Laying	Noise, Air and Water Quality
Landscaped Deck – Construction of pile caps	Noise, Air and Water Quality
Transformer Room –Installation of wailing & strut for the cofferdam/ Construction of Permanent Structure	Noise, Air and Water Quality
Road D3 Junction –Road works	Noise, Air and Water Quality
Lift 1 &2- Sheet pile installation/ Installation of waling of street for cofferdam / Footing construction	Noise and Air Quality, Chemical and Waste Management

- 7.2 The mitigation measures for environmental impact including Air Quality, Construction Noise, Water Quality, Chemical and Waste Management, Landscape and Visual shall be implemented:
  - Sufficient watering of the works site with the active dust emitting activities,
  - Limitation of the speed for vehicles on unpaved site roads,
  - Properly cover the stockpiles,
  - Good maintenance to the plant and equipment,
  - Use of quieter plant and Quality Powered Mechanical Equipment (QPME),
  - Provide movable noise barriers,
  - Appropriate desilting/ sedimentation devices provided on site for treatment before discharge,
  - Well maintain the drainage system to prevent the spillage of wastewater during heavy rainfall,
  - Onsite waste sorting and implementation of trip ticket system,
  - Good management and control on construction waste reduction,
  - Erection of decorative screen hoarding,
  - Strictly following the Environmental Permits and Licenses, and
  - Provide sufficient mitigation measures as recommended in Approved EIA Reports.

#### **Environmental Site Inspection and Monitoring Schedule for next month**

7.3 The tentative schedule for weekly site inspection and air quality and noise monitoring in the next month is provided in Appendix C.

#### 8. CONCLUSIONS

- 8.1 Environmental monitoring works were performed in the reporting month and all monitoring results were checked and reviewed.
- 8.2 1-hour TSP monitoring was conducted as scheduled in the reporting month. No Action/Limit Level exceedance was recorded.
- 8.3 24-hour TSP monitoring was conducted as scheduled in the reporting month. No Action/Limit Level exceedance was recorded.
- 8.4 Construction noise monitoring was conducted as scheduled in the reporting month. No Action/Limit Level exceedance was recorded.
- 8.5 No complaint was received in the reporting month.
- 8.6 No notification of summons and successful prosecutions was received in the reporting month.

## Figure

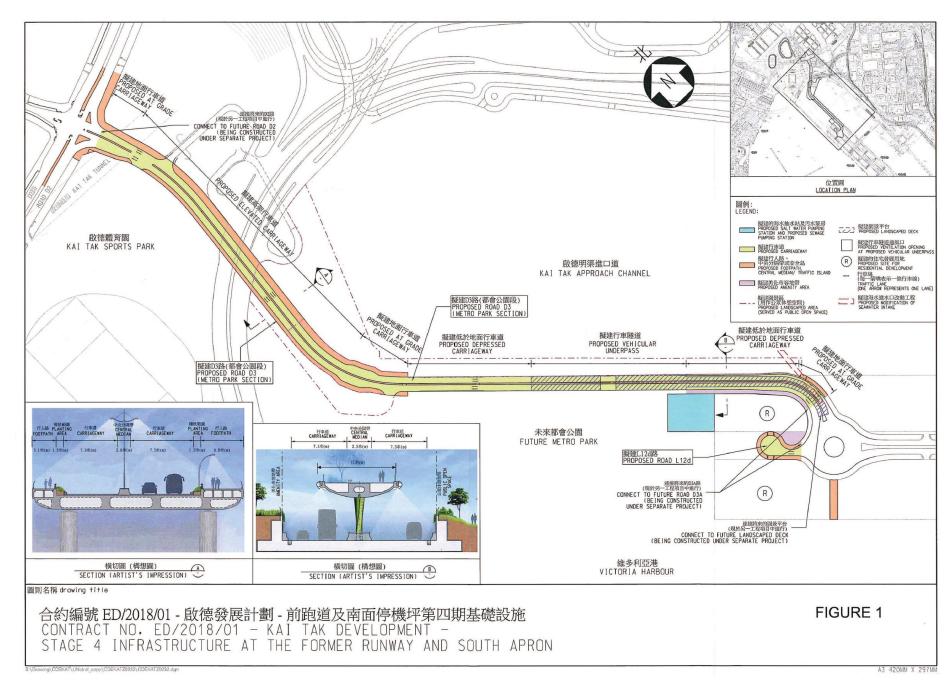


Figure 1 – Proposed works of Contract No. ED/2018/01

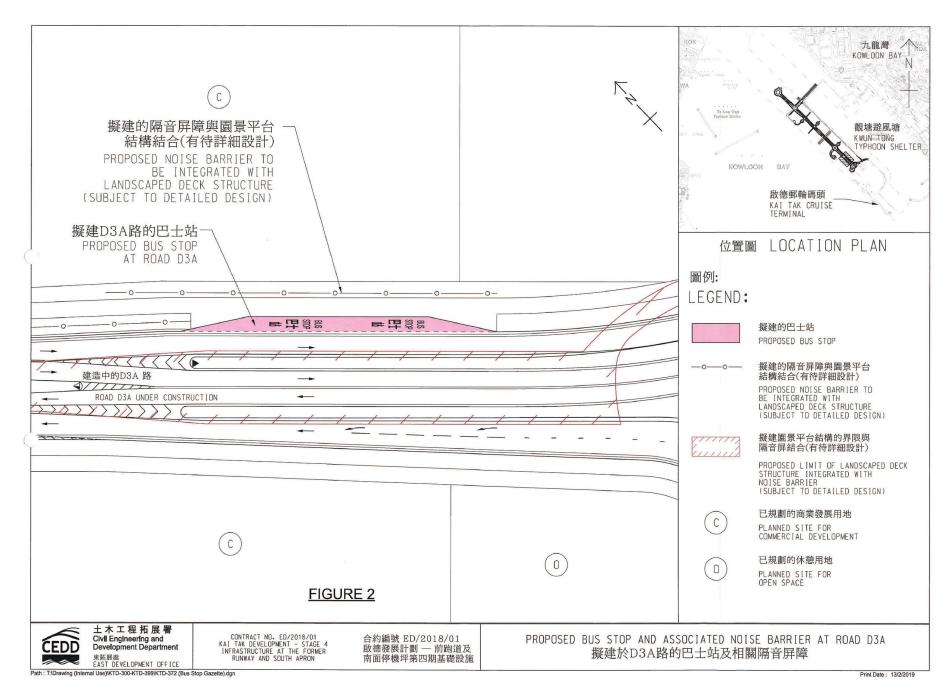


Figure 2 – Proposed Bus Stop And Associated Noise Barrier At Road D3A

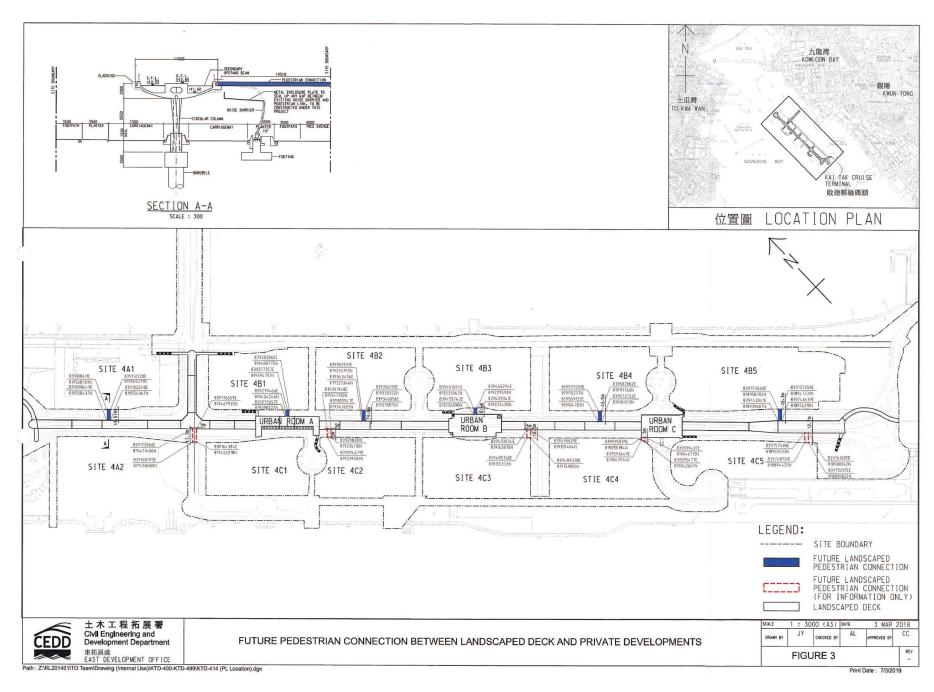


Figure 3 – Future Pedestrian Connection Between Landscaped Deck And Private Developments

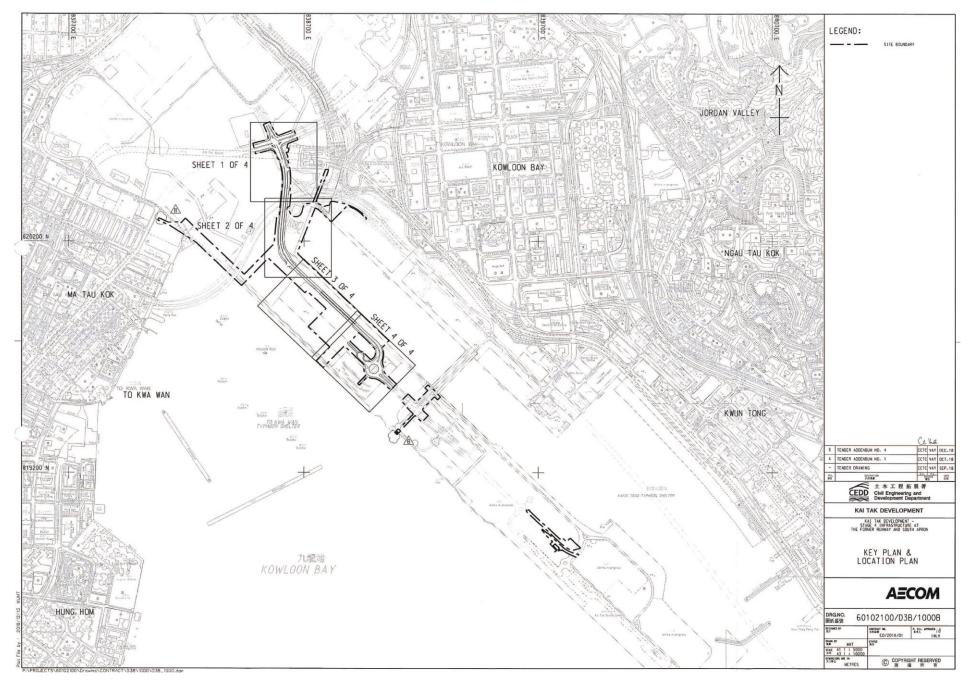


Figure 4 – Site Layout Plan

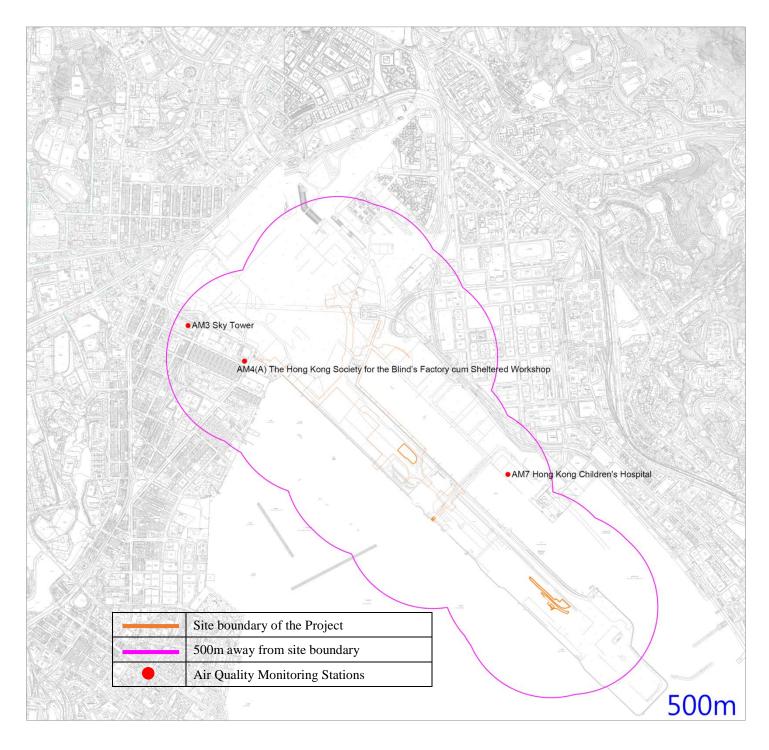
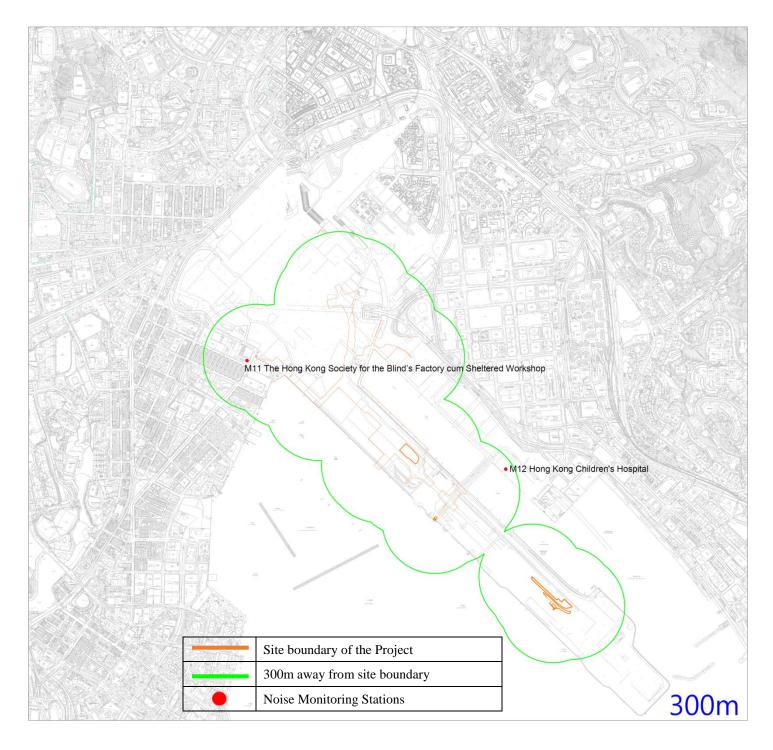
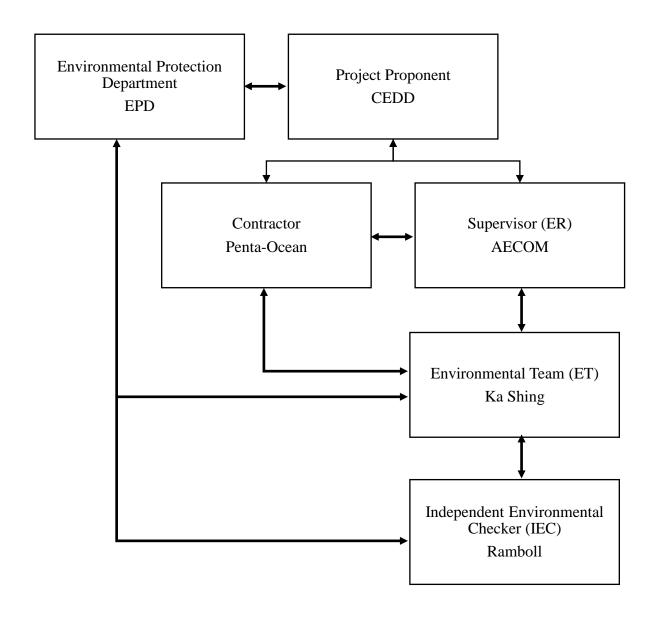


Figure 5 – Air Quality Monitoring Stations



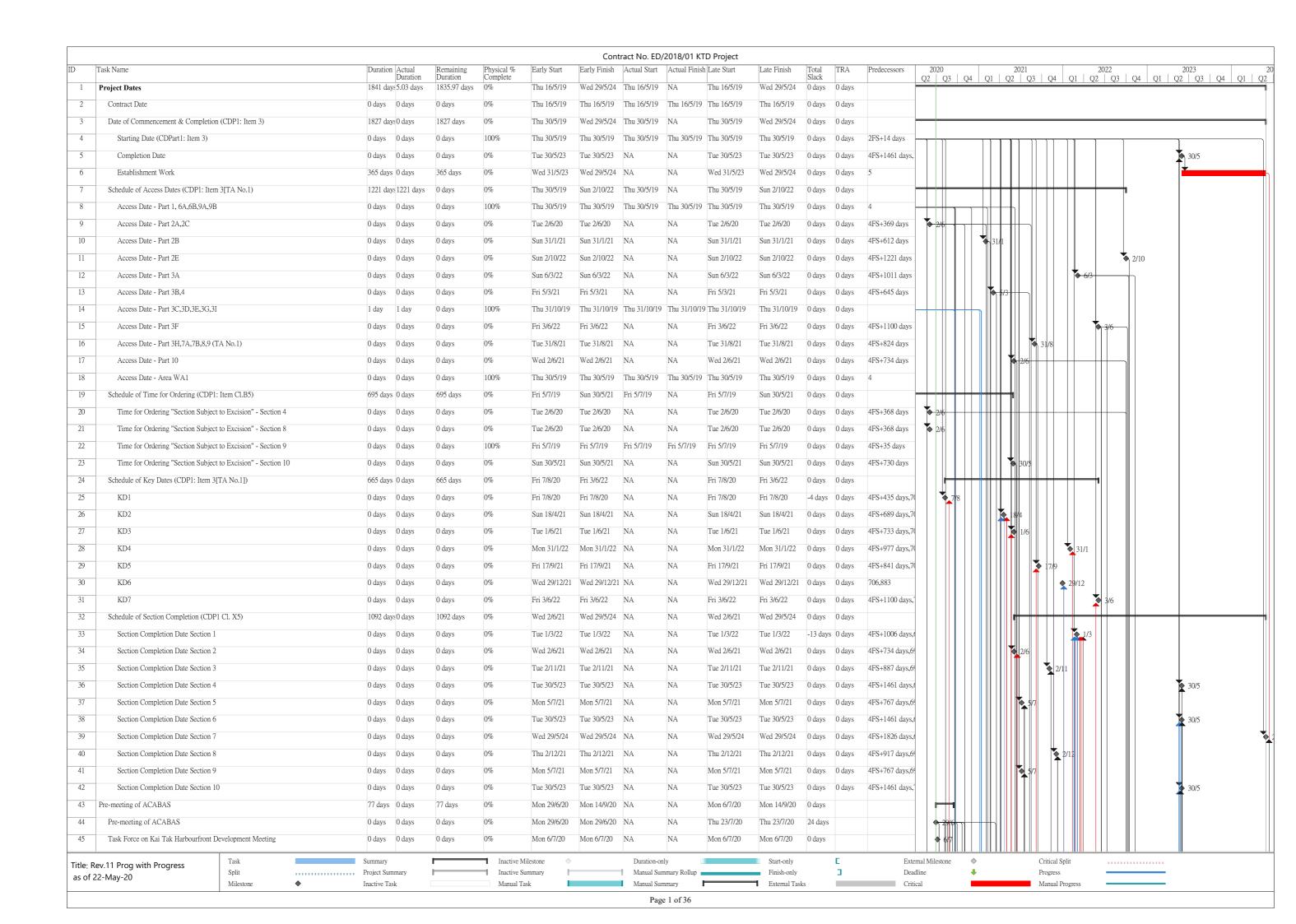
 $Figure\ 6-Noise\ Monitoring\ Stations$ 

## Appendix A – Organization Chart of EM&A Team



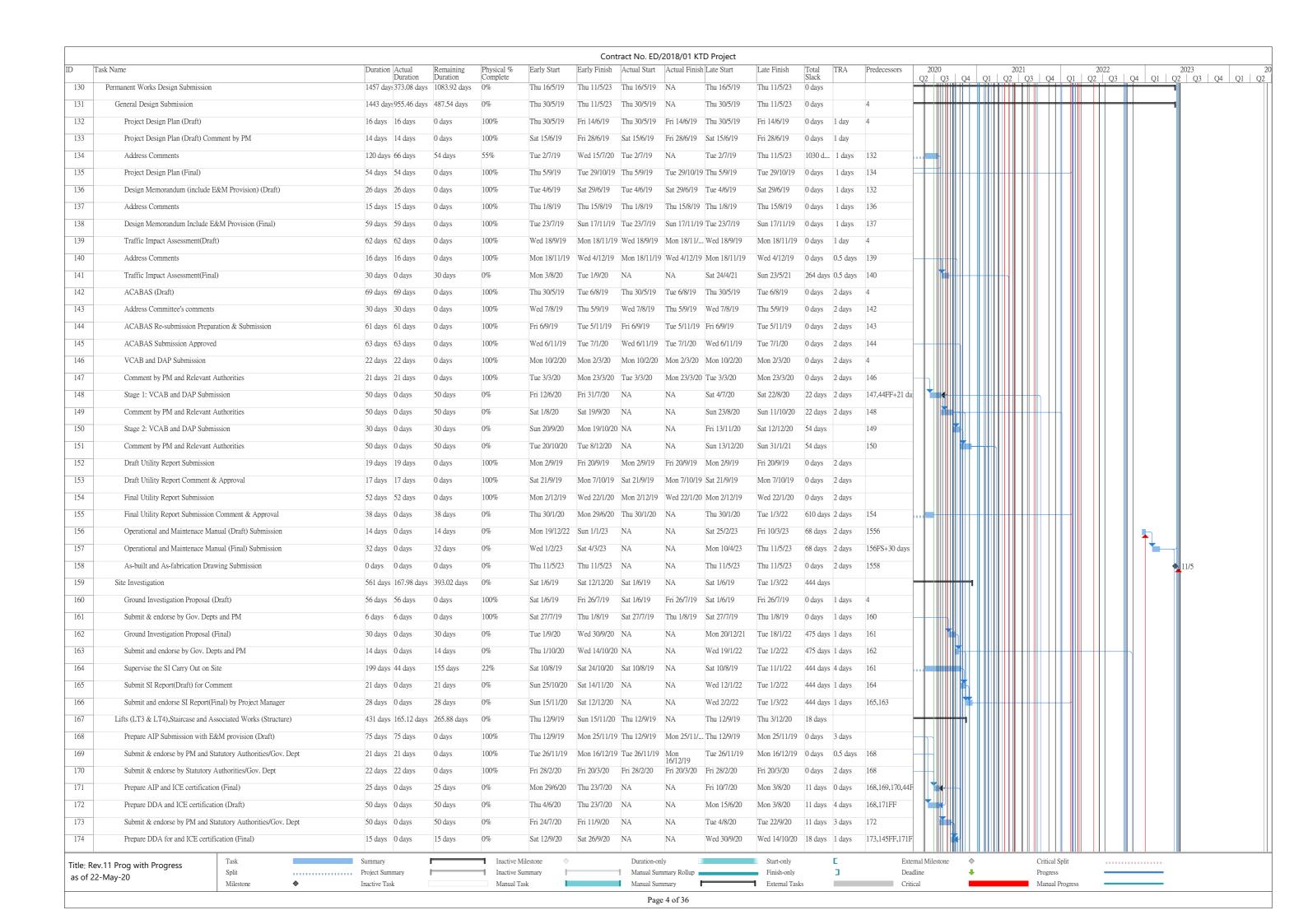
← Link of communication

## **Appendix B – Construction Programme**



_							Cont	tract No. ED/	2018/01 KT	D Project										 	
	Task Name	Duration	Actual Duration	Remaining Duration	Physical % Complete	Early Start	Early Finish	Actual Start	Actual Finish	Late Start	Late Finish	Total Slack	TRA Prede		2020   Q3   Q	4 01 0	2021	04 01	202	2023 Q1   Q2   Q	03   04   0
46	District Council Consultation	0 days		0 days	0%	Mon 14/9/20	Mon 14/9/20	NA	NA	Mon 14/9/20	Mon 14/9/20			\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	14/					Q1 Q2	2   Q+   0
47	Project Manager's Instruction	8 days	8 days	0 days	0%	Thu 20/2/20	Fri 28/2/20	Thu 20/2/20	Fri 28/2/20	Thu 20/2/20	Fri 28/2/20	0 days									
48	PMI No. 001 - BIM Promenade Walk-through Video for Infrastructure in Kai Tak Stage 4	0 days	0 days	0 days	100%	Thu 20/2/20	Thu 20/2/20	Thu 20/2/20	Thu 20/2/20	Thu 20/2/20	Thu 20/2/20	0 days		0/2							
49	PMI No. 002 - Arranagement of Restricting Site Activities due to Spread of the Noval Coronavirus Between 29 January 2020 to 02 February 2020	0 days	0 days	0 days	100%	Fri 28/2/20	Fri 28/2/20	Fri 28/2/20	Fri 28/2/20	Fri 28/2/20	Fri 28/2/20	0 days		28/2							
50	Compensation Event	16 days	16 days	0 days	0%	Mon 10/2/20	Wed 26/2/20	Mon 10/2/20	Wed 26/2/20	Mon 10/2/20	Wed 26/2/20	0 days									
51	CE/001: BIM Promenade Walk-through Video for Infrastructure in Kai Tak Stage 4	0 days	0 days	0 days	100%	Mon 10/2/20	Mon 10/2/20	Mon 10/2/20	Mon 10/2/20	Mon 10/2/20	Mon 10/2/20	0 days		V2							
52	CE/002 - Arranagement of Restricting Site Activities due to Spread of the Noval Coronavirus Between 29 January 2020 to 02 February 2020	0 days	0 days	0 days	100%	Wed 26/2/20	Wed 26/2/20	Wed 26/2/20	Wed 26/2/20	Wed 26/2/20	Wed 26/2/20	0 days		16/2							
53	Early Warning	257 days	257 days	0 days	0%	Wed 10/7/19	Mon 23/3/20	Wed 10/7/19	Mon 23/3/20	Wed 10/7/19	Mon 23/3/20	0 days									
54	EW No. 001: CLP's 11kV and 132kV Cable Routing across Utility Trough of Bridge D3 and Alongside Road D3 (Metro Park Section)	0 days	0 days	0 days	100%	Wed 10/7/19	Wed 10/7/19	Wed 10/7/19	Wed 10/7/19	Wed 10/7/19	Wed 10/7/19	0 days									
55	EW No. 002: Deep Excavation Basement Construction Works from CKR-BEM Contract	0 days	0 days	0 days	100%	Thu 5/9/19	Thu 5/9/19	Thu 5/9/19	Thu 5/9/19	Thu 5/9/19	Thu 5/9/19	0 days									
56	EW No. 003: Overhang Cables of CLP Delay the Northern Depressed Road	0 days	0 days	0 days	100%	Wed 11/9/19	Wed 11/9/19	Wed 11/9/19	Wed 11/9/19	Wed 11/9/19	Wed 11/9/19	0 days									
7	EW No. 004: Late Commencement on Noise and Air Baseline Monitoring Delay the Northern Depressed Road CH1560 to 1720	0 days	0 days	0 days	100%	Mon 4/11/19	Mon 4/11/19	Mon 4/11/19	Mon 4/11/19	Mon 4/11/19	Mon 4/11/19	0 days									
i8	EW No. 005: Maintain the SCL RoW which should have been diverted to the RoW Constructed by KTSP caused Disruption to the Construction of North Approach Ramp especially affect the KTD1	0 days	0 days	0 days	100%	Wed 13/11/19	Wed 13/11/19	Wed 13/11/19	Wed 13/11/19	Wed 13/11/19	Wed 13/11/19	0 days									
9	EW No. 006: Deferral of Design Deliverables	0 days	0 days	0 days	100%	Mon 16/12/19	Mon 16/12/19	Mon 16/12/19	Mon 16/12/	Mon 16/12/19	Mon 16/12/19	0 days									
60	EW No. 007: Delay on Driven H-piles by KTSP may affect the KD1	0 days	0 days	0 days	100%	Fri 20/12/19	Fri 20/12/19	Fri 20/12/19	Fri 20/12/19	Fri 20/12/19	Fri 20/12/19	0 days									
1	EW No. 008: Not Allow to Extract Sheetpiles of North Approach Ramp beside Kai Tak Sport Park as Discussed at the Interface Meeting	0 days	0 days	0 days	100%	Fri 27/12/19	Fri 27/12/19	Fri 27/12/19	Fri 27/12/19	Fri 27/12/19	Fri 27/12/19	0 days									
2	EW No. 010: Existing 150mm Fresh Water Pipe clashing with Bridge D3 and South Approach Ramp	0 days	0 days	0 days	100%	Wed 8/1/20	Wed 8/1/20	Wed 8/1/20	Wed 8/1/20	Wed 8/1/20	Wed 8/1/20	0 days									
3	EW No. 011: Additional Requirement for Special Arrangement for Design and Construction of Noise Barrier fir Future Connection of Footbridge FB10 from Development Site 4B5	0 days	0 days	0 days	100%	Tue 14/1/20	Tue 14/1/20	Tue 14/1/20	Tue 14/1/20	Tue 14/1/20	Tue 14/1/20	0 days									
4	EW No. 014: Planning of the Works in Revised Programme (Rev. 6)	0 days	0 days	0 days	100%	Mon 10/2/20	Mon 10/2/20	Mon 10/2/20	Mon 10/2/20	Mon 10/2/20	Mon 10/2/20	0 days		V2							
5	EW No. 015: Outbreak of Novel Coronavirus (Constraints on Working Time)	0 days	0 days	0 days	100%	Tue 11/2/20	Tue 11/2/20	Tue 11/2/20	Tue 11/2/20	Tue 11/2/20	Tue 11/2/20	0 days		/2							
5	EW No. 016: Outbreak of Novel Coronavirus (Late Supply of Agggregate)	0 days	0 days	0 days	100%	Wed 19/2/20	Wed 19/2/20	Wed 19/2/20	Wed 19/2/20	Wed 19/2/20	Wed 19/2/20	0 days		9/2							
7	EW No. 020: GEO Audit for Underpass D3	0 days	0 days	0 days	100%	Fri 13/3/20	Fri 13/3/20	Fri 13/3/20	Fri 13/3/20	Fri 13/3/20	Fri 13/3/20	0 days		13/3							
8	EW No. 021: Unforessen Underground Water at North Approach Ramp Bay 6	0 days	0 days	0 days	100%	Thu 12/3/20	Thu 12/3/20	Thu 12/3/20	Thu 12/3/20	Thu 12/3/20	Thu 12/3/20	0 days		12/3							
9	EW No. 022:Deferral of Interface Management Plan Submission for Noise Barrier Works	0 days	0 days	0 days	100%	Fri 13/3/20	Fri 13/3/20	Fri 13/3/20	Fri 13/3/20	Fri 13/3/20	Fri 13/3/20	0 days		13/3							
0	EW No. 023:Disruption of the Works due to Stockpile was not allowed to dispose to the Proposed Disposal Ground	0 days	0 days	0 days	100%	Mon 16/3/20	Mon 16/3/20	Mon 16/3/20	Mon 16/3/20	Mon 16/3/20	Mon 16/3/20	0 days		16/3							
1	EW No. 025: Broken Steel Casing for Bored Pile P02-BP2	0 days	0 days	0 days	100%	Mon 23/3/20	Mon 23/3/20	Mon 23/3/20	Mon 23/3/20	Mon 23/3/20	Mon 23/3/20	0 days		23/	3						
2	Contractor's Notification of Compensation Event	14 days	0 days	14 days	0%	Thu 28/5/20	Thu 11/6/20	NA	NA	Tue 9/6/20	Tue 7/7/20	12 days			1						
3	Compensation Event (CNCE) No. 009 - Inclement Weather in April 2020	0 days	0 days	0 days	0%	Thu 28/5/20	Thu 28/5/20	NA	NA	Tue 7/7/20	Tue 7/7/20	40 days		•	<del>-28</del> /5						
4	Compensation Event - Inclement Weather in May 2020	0 days	0 days	0 days	0%	Thu 11/6/20	Thu 11/6/20	NA	NA	Tue 9/6/20	Tue 9/6/20	-2 days			<b>◆</b> 1√6						
5	Project Submission	1457 day	401.03 days	1055.97 days	0%	Thu 16/5/19	Thu 11/5/23	Thu 16/5/19	NA	Thu 16/5/19	Thu 11/5/23	0 days	0 days								
5	Submit Third Parties Insurance	71 days	71 days	0 days	100%	Tue 18/6/19	Tue 27/8/19	Tue 18/6/19	Tue 27/8/19	Tue 18/6/19	Tue 27/8/19	0 days	0 days 4								
7	Works Programme	160 days	160 days	0 days	0%	Thu 16/5/19	Tue 22/10/19	Thu 16/5/19	Thu 15/8/19	Thu 16/5/19	Tue 22/10/19	0 days									
3	Submit First Programme	20 days		0 days	100%	Thu 16/5/19	Tue 4/6/19	Thu 16/5/19	Tue 4/6/19	Thu 16/5/19	Tue 4/6/19	0 days	0 days 2								
)	Review and Comment by Project Manager	9 days		0 days	100%	Wed 5/6/19	Thu 13/6/19	Wed 5/6/19	Thu 13/6/19	Wed 5/6/19	Thu 13/6/19	0 days	0 days 78								
)	Revise and Resubmission of Works Programme	42 days		0 days	100%	Fri 14/6/19			Thu 25/7/19		Thu 25/7/19		0 days 79								
_	Final Review and Acceptance of the First Programme by Project Manager	20 days		0 days	100%	Sat 27/7/19			Thu 15/8/19		Thu 15/8/19	-	0 days 80								
2	Submit Health and Safety Management Plan (ACC Cl. D6(2))	6 days		0 days	100%	Thu 30/5/19	Tue 4/6/19	Thu 30/5/19			Tue 4/6/19		0.5 day 4								
3	Submit Detailed Programme for Safety Risk (ER Part 7, Cl. 7.3.4)	34 days		0 days	100%	Mon 9/12/19	Sat 11/1/20		Sat 11/1/20		Sat 11/1/20		0.5 day 4								
4	Submit Environmental Management Plan (ACC Cl. D20(2))	6 days		0 days	100%	Thu 30/5/19	Tue 4/6/19	Thu 30/5/19			Tue 4/6/19		0.5 day 4								
15	Submit BIM Models Deliverables		262 days	0 days	0%	Tue 13/8/19		Tue 13/8/19				0 days	0.5 udy 4								
·lo·	Pay 11 Progress Task	Summary			Inactive M	ilestone $\Diamond$		Duration-on	ıly		Start-only		E	External N	filestone		Cı	ritical Split			
	22-May-20 Split	Project Sum			Inactive Su	mmary		Manual Sur	nmary Rollup 🕳		Finish-only		3	Deadline		<b>‡</b>	Pr	rogress		_	
	Milestone •	Inactive Tas	k		Manual Ta	sk		Manual Sur	nmary		External Tasl	ks		Critical			M	anual Progres	SS •		

							Con	tract No. ED	/2018/01 KTD P	Project													
	Task Name	Duration		Remaining	Physical %	Early Start	Early Finish	Actual Start	Actual Finish Lat	te Start	Late Finish		TRA	Predecessors	2020	2   04   6		2021	4 01   6	2022	24 01 0	2023	01
86	Existing Site Model (Topography)	46 days	Duration 46 days	Duration 0 days	Complete 100%	Tue 13/8/19	Fri 27/9/19	Tue 13/8/19	Fri 27/9/19 Tue	e 13/8/19	Fri 27/9/19	Slack 0 days	1 day		Q2   Q	3 Q4 Q	Q1 Q2	Q3   Q	4   Q1   Q	/2   Q3   C	Q4   Q1   Q	2   Q3   (	24   Q1
87	Existing Underground Utilities (UU) Model	33 days	33 days	0 days	100%	Mon 26/8/19	Fri 27/9/19	Mon 26/8/19	Fri 27/9/19 Mo	on 26/8/19	Fri 27/9/19	0 days	1 day										
88	3D Digital Survey For Existing Conditions	44 days	44 days	0 days	100%	Mon 2/9/19	Tue 15/10/19	Mon 2/9/19	Tue 15/10/19 Mo	on 2/9/19	Tue 15/10/19	0 days	1 day										
89	3D Photogrametry Model	46 days	46 days	0 days	100%	Mon 16/9/19	Thu 31/10/19	Mon 16/9/19	Thu 31/10/19 Mo	on 16/9/19	Thu 31/10/19	0 days	1 day										
90	AIP Model	16.92 day	16.92 days	0 days	100%	Fri 6/9/19	Sun 22/9/19	Fri 6/9/19	Sun 22/9/19 Fri	6/9/19	Sun 22/9/19	0 days	1 day										
91	Interfacing Contract Model	53 days	53 days	0 days	100%	Mon 9/9/19	Thu 31/10/19	Mon 9/9/19	Thu 31/10/19 Mo	on 9/9/19	Thu 31/10/19	0 days	1 day										
92	Monthly Updated BIM Model	1 day	1 day	0 days	100%	Thu 31/10/19	Thu 31/10/19	Thu 31/10/19	Thu 31/10/19 Thu	u 31/10/19	Thu 31/10/19	0 days	1 day										
93	4D Model Linked Up with Programme	0 days	0 days	0 days	100%	Thu 30/4/20	Thu 30/4/20	Thu 30/4/20	Thu 30/4/20 Thu	u 30/4/20	Thu 30/4/20	0 days	1 day		♦ 30/4								
94	Construction Method Simulation (CMS) in 3D Model	0 days	0 days	0 days	100%	Wed 22/4/20	Wed 22/4/20	Wed 22/4/20	Wed 22/4/20 We	ed 22/4/20	Wed 22/4/20	0 days	1 day		<b>♦</b> 22/4								
95	BIM Deliverables Schedule	896 days	3.72 days	892.28 days	0%	Thu 16/5/19	Wed 27/10/2	1 Thu 16/5/19	NA Thu	u 16/5/19	Tue 11/1/22	76 days											
96	Establish BIM Team	0 days	0 days	0 days	100%	Sat 3/8/19	Sat 3/8/19	Sat 3/8/19	Sat 3/8/19 Sat	t 3/8/19	Sat 3/8/19	0 days	1 day										
97	BIM Execution Plan	0 days		0 days	100%	Sat 31/8/19	Sat 31/8/19	Sat 31/8/19	Sat 31/8/19 Sat	1 31/8/19	Sat 31/8/19	0 days	1										
98	BIM Submission Schedule	0 days		0 days	100%	Fri 16/8/19	Fri 16/8/19	Fri 16/8/19	Fri 16/8/19 Fri	16/8/19	Fri 16/8/19	0 days	_										
99	BIM 360 License	0 days	-	0 days	100%	Sat 31/8/19	Sat 31/8/19	Sat 31/8/19	Sat 31/8/19 Sat		Sat 31/8/19	0 days	_		$-\parallel \parallel \parallel \parallel$								
100	BIM/Drawing Management Software System	0 days		0 days	100%	Sat 31/8/19	Sat 31/8/19	Sat 31/8/19	Sat 31/8/19 Sat		Sat 31/8/19	0 days											
101	CDE Setup		1 day	0 days	100%	Sat 31/8/19	Mon 9/9/19	Sat 31/8/19	Mon 9/9/19 Sat		Mon 9/9/19	0 days											
102	Clash Report Format		0 days	0 days	100%	Thu 12/9/19			Thu 12/9/19 Thu		Thu 12/9/19	0 days	-										
103	Monthly Report Format	0 days		0 days	100%	Thu 12/9/19			Thu 12/9/19 Thu		Thu 12/9/19	0 days											
103	Quality Assurance Plan for BIM				100%	Mon 30/9/19			Mon 30/9/19 Mo		Mon 30/9/19												
104		0 days		0 days	100%																		
.06	BIM Training Plan	0 days		0 days	100%	Thu 10/10/19			Thu 10/10/19 Thu Mon 30/9/19 Mo		Thu 10/10/19		-										
	BIM Training Schedule for CIC Training	0 days		0 days		Mon 30/9/19					Mon 30/9/19		-										
.07	Monthly BIM Progress Report		0 days	0 days	100%	Thu 16/5/19			Tue 31/12/19 Thu		Tue 31/12/19		-										
108	Monthly Clash Report		1 day	0 days	100%	Tue 31/3/20	Tue 31/3/20				Tue 31/3/20	0 days											
109	BIM Object Libraries		1 day	0 days	100%	Thu 12/9/19			Thu 12/9/19 Thu			0 days	1										
110	Trees Preservation and Removal Proposal (TPRP) for tress along promenade open space Submission	-	-	0 days	0%	Mon 2/11/20	Mon 2/11/20			n 17/1/21	Sun 17/1/21	63 days				2/11							
111	Trees Preservation and Removal Proposal (TPRP) for tress along promenade open space Submission Comment & Approval by Relevant Government Authories	e 360 days	0 days	360 days	0%	Mon 2/11/20	Wed 27/10/2	1 NA	NA Sur	n 17/1/21	Tue 11/1/22	76 days	1 day	110				-					
112	Trees Preservation and Removal Proposal (TPRP) for tress along Sing Kai Submission	0 days	0 days	0 days	0%	Fri 31/7/20	Fri 31/7/20	NA	NA We	ed 30/9/20	Wed 30/9/20	52 days	1 day		-	31./7							
113	Trees Preservation and Removal Proposal (TPRP) for tress along Sing Kai Road	360 days	0 days	360 days	0%	Fri 31/7/20	Sun 25/7/21	NA	NA We	ed 30/9/20	Fri 24/9/21	61 days	1 day	112									
	Submission Comment & Approval by Relevant Government Authories																						
114	Temporary Traffic Management	478 days	447.84 days	30.16 days	0%	Thu 30/5/19	Fri 18/9/20	Thu 30/5/19		u 30/5/19	Fri 25/9/20	7 days				TT							
115	Submit Traffic Engineering Consultant and TTM Team Leader (PS1.16(3))	14 days	14 days	0 days	100%	Thu 30/5/19	Wed 12/6/19	Thu 30/5/19	Wed 12/6/19 Thu	u 30/5/19	Wed 12/6/19	0 days	1 day	4									
116	Submit EP Mgt System Co-ordinator (PS Cl. 1.18N(2))	7 days	7 days	0 days	100%	Thu 30/5/19	Wed 5/6/19	Thu 30/5/19	Wed 5/6/19 Thu	u 30/5/19	Wed 5/6/19	0 days	1 day	4									
117	Approve of EP Co-ordinator by Project Manager (PS Cl. 1.18N(2))	14 days	14 days	0 days	100%	Thu 6/6/19		Thu 6/6/19	Wed 19/6/19 Thu		Wed 19/6/19	0 days	1 day	116									
118	Submit UU detection equipment for Supervisor approval (PS Cl. 1.25A(1))	7 days	7 days	0 days	100%	Thu 30/5/19	Wed 5/6/19	Thu 30/5/19	Wed 5/6/19 Thu	u 30/5/19	Wed 5/6/19	0 days	1 day	4									
119	Submit & obtain approval: site office's location and layout plan (PS Cl. 1.45(11)) (7d submission + 14d approval)	47 days	47 days	0 days	100%	Thu 30/5/19	Fri 18/10/19	Thu 30/5/19	Fri 18/10/19 Thu	u 30/5/19	Fri 18/10/19	0 days	1 day	4									
120	Submit Site survey record (PS Cl.1.47(7))	34 days	34 days	0 days	100%	Thu 30/5/19	Tue 2/7/19	Thu 30/5/19	Tue 2/7/19 Thu	u 30/5/19	Tue 2/7/19	0 days	1 day	4									
121	Submit & obtain approval: fencing & hoarding plan (PS Cl. 1.48(10)	40 days	0 days	40 days	0%	Mon 10/8/20	Fri 18/9/20	NA	NA Mo	on 17/8/20	Fri 25/9/20	7 days	0.5 days	4						+++			
122	Submit site facilities (PS Cl. 1.50S)	65 days	65 days	0 days	100%	Thu 30/5/19	Fri 2/8/19	Thu 30/5/19	Fri 2/8/19 Thu	u 30/5/19	Fri 2/8/19	0 days	0.5 days	4									
123	Submit security system (PS Cl. 1.53A(5))	36 days	36 days	0 days	100%	Thu 30/5/19	Thu 4/7/19	Thu 30/5/19	Thu 4/7/19 Thu	u 30/5/19	Thu 4/7/19	0 days	0.5 days	4									
24	Submit Interface Management Plan (PS Cl. 1.89(2))	47 days	47 days	0 days	100%	Thu 30/5/19	Mon 15/7/19	Thu 30/5/19	Mon 15/7/19 Thu	u 30/5/19	Mon 15/7/19	0 days	0.5 days	4									
125	Submit Subcontractor Management Plan (ACC Cl. C5(1))	13 days	13 days	0 days	100%	Thu 30/5/19	Tue 11/6/19	Thu 30/5/19	Tue 11/6/19 Thu	u 30/5/19	Tue 11/6/19	0 days	0.5 days	4									
126	Submit Temporary Drainage and Sewerage Management Plan (PS Cl. 1.24A(1))	174 days	174 days	0 days	100%	Thu 30/5/19	Tue 19/11/19	Thu 30/5/19	Tue 19/11/19 Thu	u 30/5/19	Tue 19/11/19	0 days	1 day	4									
127	Submit EM&A Manual (ER Part 8, Cl. 8.2)	6 days	6 days	0 days	100%	Thu 30/5/19	Tue 4/6/19	Thu 30/5/19	Tue 4/6/19 Thu	u 30/5/19	Tue 4/6/19	0 days	0 days	4									
128	Submit Proposal of selection of suppliers of Plant and Materials (ACC Cl. C11(1)	80 days	80 days	0 days	100%	Thu 30/5/19	Sat 17/8/19	Thu 30/5/19	Sat 17/8/19 Thu	u 30/5/19	Sat 17/8/19	0 days	0 days	4									
129	Submit Contractor's Management Team (ACC Cl. D1(3))	50 days	50 days	0 days	100%	Thu 30/5/19	Thu 18/7/19	Thu 30/5/19	Thu 18/7/19 Thu	u 30/5/19	Thu 18/7/19	0 days	0 days	4	$\parallel \parallel \parallel$								
	Task	Summary			Inactive Mi	ilestone 🔷		Duration-o	nlv		Start-only		<u> </u>	Fv	temal Mileston	<u>                                     </u>		Critic	al Split				
	ev. i i Prog with Progress	Project Sumn	nary	-	Inactive Su			Manual Su	mmary Rollup		Finish-only		3		adline	•		Progr					
	Milestone •	Inactive Task			Manual Tas	sk		Manual Su	mmary		External Tasl	CS		Cr	itical			Manu	al Progress				



								tract No. ED,	/2016/01 KI	D Project						
Task	Name	Duration	Actual Duration	Remaining Duration	Physical % Complete	Early Start	Early Finish	Actual Start	Actual Finish	Late Start	Late Finish	Total TRA	A Predecesso	ors 2020 Q2 Q3	2021   2022   Q4   Q1   Q2   Q3   Q4   Q1   Q2   Q3	2023
75	Submit & endorse by PM and Statutory Authorities/Gov. Dept	50 days	0 days	50 days	0%	Sun 27/9/20	Sun 15/11/20	NA	NA	Thu 15/10/20	Thu 3/12/20	18 days 3 da	ys 174			
76	Noise barrier fronting to 4B5 at Rd D3A & Bus Lay By (Section 5&9)	338 days	215.23 days	122.77 days	0%	Mon 4/11/19	Tue 6/10/20	Mon 4/11/19	NA	Mon 4/11/19	Wed 7/10/20	1 day			<del></del>	
77	Prepare AIP Submission (Draft)	38 days	38 days	0 days	100%	Mon 4/11/19	Wed 11/12/19	Mon 4/11/19	Wed 11/12/	. Mon 4/11/19	Wed 11/12/19	0 days 2 da	ys			
78	Submit & endorse by PM and Statutory Authorities/Gov. Dept	167 days	162 days	5 days	97%	Thu 12/12/19	Tue 26/5/20	Thu 12/12/19	NA	Thu 12/12/19	Wed 27/5/20	1 day	177			
179	Prepare AIP and ICE certification (Final)	56 days	31 days	25 days	55%	Wed 22/4/20	Tue 16/6/20	Wed 22/4/20	NA	Wed 22/4/20	Wed 17/6/20	1 day	178FF+21	days		
180	Prepare DDA Subm (Draft)	18 days	18 days	0 days	100%	Wed 1/4/20	Sat 18/4/20	Wed 1/4/20	Sat 18/4/20	Wed 1/4/20	Sat 18/4/20	0 days 0.5	days			
181	Submit & endorse by PM	55 days	35 days	20 days	64%	Sat 18/4/20	Thu 11/6/20	Sat 18/4/20	NA	Sat 18/4/20	Thu 6/8/20	56 days	180			
.82	Submit & endorse by Statutory Authorities/Gov. Dept	50 days		50 days	0%	Wed 17/6/20	Wed 5/8/20		NA	Thu 18/6/20	Thu 6/8/20	1 day	180,179			
.83	Prepare DDA for and ICE certification (Final) (Original Contract Scope)	12 days		12 days	0%	Thu 6/8/20	Mon 17/8/20		NA	Fri 7/8/20	Tue 18/8/20	1 day 1 da				
84	Submit & endorse by PM and Statutory Authorities/Gov. Dept	50 days		50 days	0%	Tue 18/8/20	Tue 6/10/20		NA	Wed 19/8/20	Wed 7/10/20	1 day 1 da				
.85	Decking for Underpass (Rd L14)											1	ys 103			
		304 days		304 days	0%	Mon 20/7/20	Wed 19/5/21		NA	Fri 31/7/20	Sun 30/5/21	11 days	44777 40			
86	Structure Prepare AIP and ICE certification (Draft)	25 days		25 days	0%	Mon 20/7/20	Thu 13/8/20		NA	Fri 31/7/20	Mon 24/8/20	11 days 3 da		lays		
187	Submit & endorse by PM and Statutory Authorities/Gov. Dept	50 days	0 days	50 days	0%	Fri 14/8/20		NA	NA	Tue 25/8/20	Tue 13/10/20	11 days 0.5	-			
88	Prepare AIP and ICE certification (Final)	15 days	0 days	15 days	0%	Sat 3/10/20	Sat 17/10/20	NA	NA	Wed 14/10/20	Wed 28/10/20	11 days 1 da	y 186,187			
89	Prepare DDA and ICE certification (Draft)	89 days	0 days	89 days	0%	Sun 18/10/20	Thu 14/1/21	NA	NA	Thu 29/10/20	Mon 25/1/21	11 days 1 da	y 186,188			
190	Submit & endorse by PM and Statutory Authorities/Gov. Dept	50 days	0 days	50 days	0%	Fri 15/1/21	Fri 5/3/21	NA	NA	Tue 26/1/21	Tue 16/3/21	11 days 0.5	days 189			
91	Prepare DDA and ICE certification (Final)	25 days	0 days	25 days	0%	Sat 6/3/21	Tue 30/3/21	NA	NA	Wed 17/3/21	Sat 10/4/21	11 days 2 da	ys 190			
92	Submit & endorse by PM and Statutory Authorities/Gov. Dept	50 days	0 days	50 days	0%	Wed 31/3/21	Wed 19/5/21	NA	NA	Sun 11/4/21	Sun 30/5/21	11 days 1 da	y 191			
93	Road D3 Bridge & Approach Ramps	439 days	358.08 days	80.92 days	0%	Thu 30/5/19	Mon 10/8/20	Thu 30/5/19	NA	Thu 30/5/19	Thu 8/10/20	59 days	4			
94	D3 Bridge Substructure	439 days	358.08 days	80.92 days	0%	Thu 30/5/19	Mon 10/8/20	Thu 30/5/19	NA	Thu 30/5/19	Thu 8/10/20	59 days				
95	Prepare AIP and ICE certification (Draft)	66 days	66 days	0 days	100%	Thu 30/5/19	Sat 3/8/19	Thu 30/5/19	Sat 3/8/19	Thu 30/5/19	Sat 3/8/19	0 days 3 da	ys 4			
96	Submit & endorse by PM and Statutory Authorities/Gov. Dept	15 days	15 days	0 days	100%	Mon 5/8/19	Mon 19/8/19	Mon 5/8/19	Mon 19/8/19	Mon 5/8/19	Mon 19/8/19	0 days 1 da	vs 195,138			
97	Prepare AIP and ICE certification (Final)		30 days	0 days	100%	Mon 23/12/19	Tue 21/1/20	Mon 23/12/19	Tue 21/1/20	Mon 23/12/19	Tue 21/1/20	0 days 0 da				
98	Prepare DDA and ICE certification (Draft)		106 days	0 days	100%	Fri 19/7/19		Fri 19/7/19			Sun 17/11/19	1				
			-													
99	Submit & endorse by PM		17 days	0 days	100%	Wed 20/11/19				Wed 20/11/19	Fri 6/12/19	0 days 3 da				
000	Submit & endorse by Statutory Authorities/Gov. Dept		45 days	0 days	100%	Fri 24/1/20		Fri 24/1/20	Wed 18/3/20		Wed 18/3/20	0 days 1 da				
01	Prepare DDA for and ICE certification (Include P02-BP2 Remedial Pile) (Contractor Bear DDA Approval Risk)		75 days	30 days	71%	Mon 9/3/20		Mon 9/3/20		Mon 9/3/20		59 days 1 da				
202	Submit & endorse by PM and Statutory Authorities/Gov. Dept (Contractor Bea DDA Approval Risk)	ar 50 days	0 days	50 days	0%	Mon 22/6/20	Mon 10/8/20	NA	NA	Thu 20/8/20	Thu 8/10/20	59 days 1 da	ys 201			
203	D3 Bridge Superstructure	728 days	370.67 days	357.33 days	0%	Thu 30/5/19	Wed 26/5/21	Thu 30/5/19	NA	Thu 30/5/19	Wed 21/7/21	56 days			<del>                                      </del>	
04	Prepare AIP and ICE certification (Draft)	101 days	101 days	0 days	100%	Thu 30/5/19	Sat 7/9/19	Thu 30/5/19	Sat 7/9/19	Thu 30/5/19	Sat 7/9/19	0 days 1 da	у			
205	Submit & endorse by PM and Statutory Authorities/Gov. Dept	19 days	19 days	0 days	100%	Mon 9/9/19	Fri 27/9/19	Mon 9/9/19	Fri 27/9/19	Mon 9/9/19	Fri 27/9/19	0 days 1 da	y 204			
06	Prepare AIP and ICE certification (Final)	135 days	135 days	0 days	100%	Wed 20/11/19	Thu 2/4/20	Wed 20/11/19	Thu 2/4/20	Wed 20/11/19	Thu 2/4/20	0 days 3 da	ys 205			
207	Prepare DDA and ICE certification (Draft)	222 days	222 days	0 days	100%	Fri 19/7/19	Tue 25/2/20	Fri 19/7/19	Tue 25/2/20	Fri 19/7/19	Tue 25/2/20	0 days 3 da	ys 205			
08	Submit & endorse by PM	23 days	23 days	0 days	100%	Wed 26/2/20	Thu 19/3/20	Wed 26/2/20	Thu 19/3/20	Wed 26/2/20	Thu 19/3/20	0 days 2 da	ys 207			
209	Submit & endorse by Statutory Authorities/Gov. Dept	50 days	0 days	50 days	0%	Mon 29/6/20	Mon 17/8/20	NA	NA	Thu 16/7/20	Thu 3/9/20	17 days 2 da	ys 207,206FF	7+12 d		
10	Prepare DDA for and ICE certification (Final)	21 days	0 days	21 days	0%	Tue 18/8/20	Mon 7/9/20	NA	NA	Fri 4/9/20	Thu 24/9/20	17 days 1 da	ys 208,206,20	09		
11	Submit & endorse by PM and Statutory Authorities/Gov. Dept	50 days	-	50 days	0%	Tue 8/9/20	Tue 27/10/20		NA	Fri 25/9/20	Fri 13/11/20	17 days 2 da				
212	Prepare AIP (E&M works) and ICE certification (Draft)	32 days		32 days	0%	Thu 2/7/20	Sun 2/8/20		NA	Thu 27/8/20	Sun 27/9/20	56 days 2 da				
213	Submit & endorse by PM and Statutory Authorities/Gov. Dept	62 days		62 days	0%	Mon 3/8/20	Sat 3/10/20		NA	Mon 28/9/20	Sat 28/11/20	56 days 2 da				
214	Prepare AIP (E&M works) and ICE certification (Final)	32 days		32 days	0%	Sun 4/10/20	Wed 4/11/20		NA	Sun 29/11/20		56 days 2 da				
15	Submit & endorse by PM and Statutory Authorities/Gov. Dept	62 days	_	62 days	0%	Thu 5/11/20	Tue 5/1/21		NA	Thu 31/12/20	Tue 2/3/21	56 days 2 da				
16	Prepare DDA (E&M works) and ICE certification (Draft)	32 days	0 days	32 days	0%	Sat 5/12/20	Tue 5/1/21	NA	NA	Sat 30/1/21	Tue 2/3/21	56 days 2 da	ys 215FF			
17	Submit & endorse by PM and Statutory Authorities/Gov. Dept	62 days	0 days	62 days	0%	Wed 6/1/21	Mon 8/3/21	NA	NA	Wed 3/3/21	Mon 3/5/21	56 days 2 da	ys 216			
218	Prepare DDA (E&M works) and ICE certification (Final)	17 days	0 days	17 days	0%	Tue 9/3/21	Thu 25/3/21	NA	NA	Tue 4/5/21	Thu 20/5/21	56 days 2 da	ys 217			
219	Submit & endorse by PM and Statutory Authorities/Gov. Dept	62 days	0 days	62 days	0%	Fri 26/3/21	Wed 26/5/21	NA	NA	Fri 21/5/21	Wed 21/7/21	56 days 2 da	ys 218			
	1 Duna with Duna was Task	Summary	1		Inactive M	lestone	1	Duration-o	ılv		Start-only	Г		External Milestone	♦ Critical Split	
tle: Rev.1 s of 22-N	1 Prog with Progress	Project Sun	nmary		Inactive Su				nmary Rollup 🕊		Finish-only	]		Deadline Deadline	Progress	
, UI ZZ-IV	Milestone •	Inactive Tas	sk		Manual Ta	sk 📗		Manual Su	nmary I		External Tasl	cs		Critical	Manual Progress	

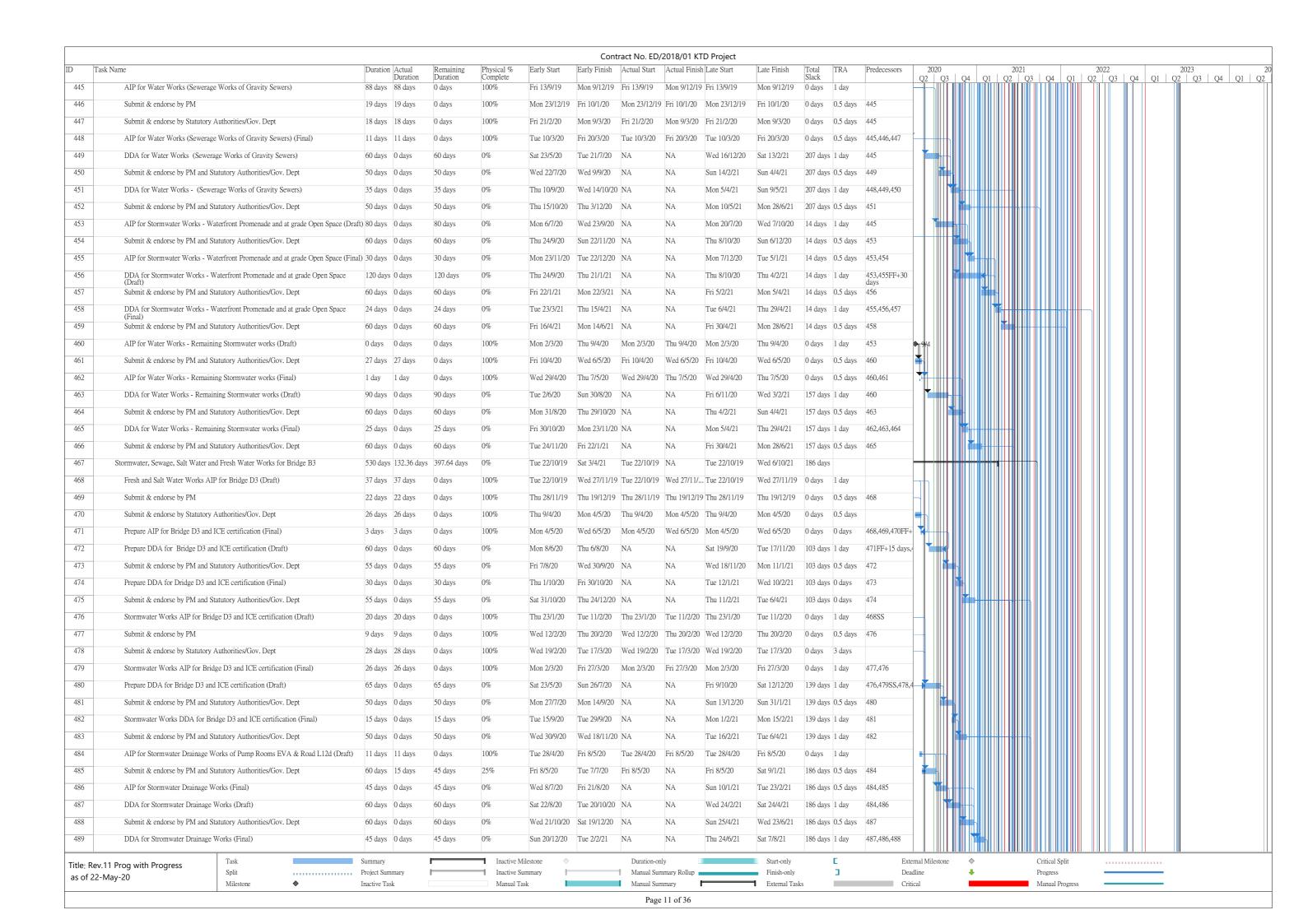
						Con	tract No. ED/	/2018/01 KT	D Project														
	Task Name	Duration Actual	Remaining	Physical %	Early Start	Early Finish	Actual Start	Actual Finish	Late Start	Late Finish	Total	TRA	Predecessors	202		4 01	2021	22   04	01	2022		2023	1 04 0
220	D3 North Approach Ramp (Structure)	Duration 398 days 348.95 days	Duration 49.05 days	Complete 0%	Mon 3/6/19	Sat 4/7/20	Mon 3/6/19	NA	Mon 3/6/19	Thu 8/10/20	Slack 96 days			Q2	Q3 (	4 Q1	Q2   0	Q3 Q4	Q1 (	Q2   Q3	Q4 Q1	Q2 Q3	Q4   Q1
21	Prepare AIP and ICE certification (Draft))	51 days 51 days	0 days	100%	Mon 3/6/19	Tue 23/7/19	Mon 3/6/19	Tue 23/7/19	Mon 3/6/19	Tue 23/7/19	0 days	3 days	4										
22	Submit & endorse by PM and Statutory Authorities/Gov. Dept	100 days 100 days	0 days	100%	Thu 25/7/19	Fri 1/11/19	Thu 25/7/19	Fri 1/11/19	Thu 25/7/19	Fri 1/11/19	0 days	1 days	221										
23	Prepare AIP and ICE certification (Final)	14 days 14 days	0 days	100%	Tue 6/8/19	Thu 19/12/19	Tue 6/8/19	Thu 19/12/19	Tue 6/8/19	Thu 19/12/19	0 days	0 days	221,222										
224	Prepare DDA (Draft) with ICE certification	66 days 66 days	0 days	100%	Fri 19/7/19	Thu 20/2/20	Fri 19/7/19	Thu 20/2/20	Fri 19/7/19	Thu 20/2/20	0 days	5 days	221,223FF										
25	Submit & endorse by PM/Statutory Authorities/Gov. Dept	31 days 31 days	0 days	100%	Mon 20/1/20	Mon 23/3/20	Mon 20/1/20	Mon 23/3/20	Mon 20/1/20	Mon 23/3/20	0 days	3 days	224										
26	Prepare DDA for and ICE certification (Final)	45 days 45 days	0 days	100%	Wed 1/4/20	Fri 15/5/20	Wed 1/4/20	Fri 15/5/20	Wed 1/4/20	Fri 15/5/20	0 days		225										
27	Submit & endorse by PM/Statutory Authorities/Gov. Dept	50 days 6 days	44 days	12%	Sat 16/5/20	Sat 4/7/20	Sat 16/5/20	NA	Sat 16/5/20	Thu 8/10/20	96 days	0.5 days	226			$\bot \parallel \parallel \parallel \parallel$							
28	D3 North Approach Ramp (E&M Works)	329 days 0 days	329 days	0%	Thu 2/7/20	Wed 26/5/21	NA	NA	Fri 27/11/20	Thu 21/10/21	148 days			-									
29	Prepare AIP (E&M works) and ICE certification (Draft)	32 days 0 days	32 days	0%	Thu 2/7/20	Sun 2/8/20	NA	NA	Fri 27/11/20	Mon 28/12/20	148 days	2 days											
30	Submit & endorse by PM and Statutory Authorities/Gov. Dept	62 days 0 days	62 days	0%	Mon 3/8/20	Sat 3/10/20	NA	NA	Tue 29/12/20	Sun 28/2/21	148 days	2 days	229										
31	Prepare AIP (E&M works) and ICE certification (Final)	32 days 0 days	32 days	0%	Sun 4/10/20	Wed 4/11/20	NA	NA	Mon 1/3/21	Thu 1/4/21	148 days		230										
32	Submit & endorse by PM and Statutory Authorities/Gov. Dept	62 days 0 days	62 days	0%	Thu 5/11/20	Tue 5/1/21	NA	NA	Fri 2/4/21	Wed 2/6/21	148 days		231										
33	Prepare DDA (E&M works) and ICE certification (Draft)	32 days 0 days	32 days	0%	Sat 5/12/20	Tue 5/1/21		NA	Sun 2/5/21	Wed 2/6/21	148 days		232FF										
234	Submit & endorse by PM and Statutory Authorities/Gov. Dept	62 days 0 days	62 days	0%	Wed 6/1/21	Mon 8/3/21		NA	Thu 3/6/21	Tue 3/8/21	148 days		233	$\parallel \parallel \parallel$									
35	Prepare DDA (E&M works) and ICE certification (Final)	17 days 0 days	17 days	0%	Tue 9/3/21	Thu 25/3/21		NA	Wed 4/8/21	Fri 20/8/21	148 days		234	$\parallel \parallel \parallel$									
36	Submit & endorse by PM and Statutory Authorities/Gov. Dept	62 days 0 days	62 days	0%	Fri 26/3/21	Wed 26/5/21		NA	Sat 21/8/21	Thu 21/10/21		2 days	235										
37	D3 South Approach Ramp	507 days 322.64 days		0%	Thu 30/5/19		Thu 30/5/19		Thu 30/5/19	Tue 16/2/21	122 days		233										
38	Prepare AIP and ICE certification (Draft)	96 days 96 days	0 days	100%	Thu 30/5/19					Mon 2/9/19	0 days												
39	Submit & endorse by PM and Statutory Authorities/Gov. Dept			100%	Wed 25/9/19	Tue 29/10/19							220										
10	Prepare AIP Submission (Final)	35 days 35 days	0 days	100%	Fri 7/2/20	Mon 4/5/20		Mon 4/5/20		Tue 29/10/19		1 day	238										
		76 days 76 days	0 days				Fri 7/2/20			Mon 4/5/20	0 days	1 day											
41	Prepare DDA and ICE certification (Draft)	50 days 50 days	0 days	100%	Wed 1/4/20	Wed 20/5/20		Wed 20/5/20		Wed 20/5/20	-	5 days	240FF+15 days										
42	Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days 2 days	58 days	3%	Thu 21/5/20	Sun 19/7/20	Thu 21/5/20		Thu 21/5/20	Wed 18/11/20			238,241										
43	Prepare DDA for and ICE certification (Final)	30 days 0 days	30 days	0%	Mon 20/7/20	Tue 18/8/20		NA	Thu 19/11/20	Fri 18/12/20	122 days		242,240FF+12	a									
44	Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days 0 days	60 days	0%	Wed 19/8/20	Sat 17/10/20		NA	Sat 19/12/20	Tue 16/2/21	122 days		243										
45	D3 South Approach Ramp (E&M Works)	392 days 0 days	392 days	0%	Sat 23/5/20		NA	NA	Wed 18/11/20	Tue 14/12/21	179 days												
46	Prepare AIP (E&M works) and ICE certification (Draft)	31 days 0 days	31 days	0%	Sat 23/5/20	Mon 22/6/20		NA	Wed 18/11/20	Fri 18/12/20	179 days		246										
47	Submit & endorse by PM and Statutory Authorities/Gov. Dept	76 days 0 days	76 days	0%	Tue 23/6/20		NA	NA	Sat 19/12/20	Thu 4/3/21	179 days		246										
48	Prepare AIP (E&M works) and ICE certification (Final)	31 days 0 days	31 days	0%	Mon 7/9/20	Wed 7/10/20		NA	Fri 5/3/21	Sun 4/4/21	179 days		247										
249	Submit & endorse by PM and Statutory Authorities/Gov. Dept	76 days 0 days	76 days	0%	Thu 8/10/20	Tue 22/12/20		NA	Mon 5/4/21	Sat 19/6/21	179 days		248										
50	Prepare DDA (E&M works) and ICE certification (Draft)	31 days 0 days	31 days	0%		Tue 22/12/20		NA	Thu 20/5/21	Sat 19/6/21	179 days		249FF										
51	Submit & endorse by PM and Statutory Authorities/Gov. Dept	76 days 0 days	76 days	0%		Mon 8/3/21		NA	Sun 20/6/21	Fri 3/9/21	179 days		250										
52	Prepare DDA (E&M works) and ICE certification (Final)	26 days 0 days	26 days	0%	Tue 9/3/21	Sat 3/4/21	NA	NA	Sat 4/9/21	Wed 29/9/21	179 days		251										
53	Submit & endorse by PM and Statutory Authorities/Gov. Dept	76 days 0 days	76 days	0%	Sun 4/4/21	Fri 18/6/21	NA	NA	Thu 30/9/21	Tue 14/12/21	179 days		252										
54	Road D3 Underpass and Depressed Road	823 days 236.99 days		0%	Thu 30/5/19	Sun 29/8/21	Thu 30/5/19		Thu 30/5/19	Wed 11/1/23								7					
55	Underpass (Structure)	486 days 320.41 days		0%	Thu 30/5/19	Sat 26/9/20	Thu 30/5/19		Thu 30/5/19	Wed 2/12/20													
56	Prepare AIP and ICE certification (Draft)	96 days 96 days	0 days	100%	Thu 30/5/19	Mon 2/9/19		Mon 2/9/19		Mon 2/9/19	-	3 days	4										
57	Submit & endorse by PM and Statutory Authorities/Gov. Dept	17 days 17 days	0 days	100%	Tue 3/9/19	Thu 19/9/19	Tue 3/9/19	Thu 19/9/19		Thu 19/9/19	0 days	1 days	256										
58	Prepare AIP and ICE certification (Final)	84 days 84 days	0 days	100%	Tue 14/1/20	Mon 6/4/20	Tue 14/1/20	Mon 6/4/20	Tue 14/1/20	Mon 6/4/20	0 days	2 days	256,257		+								
59	Prepare DDA (Draft) Preparation	156 days 156 days	0 days	100%	Tue 3/9/19	Wed 5/2/20	Tue 3/9/19	Wed 5/2/20	Tue 3/9/19	Wed 5/2/20	0 days	3 days	256										
60	DDA (Draft) Submit & endorse by PM & Statutory Authorities/Gov. Dept	169 days 34 days	135 days	20%	Thu 6/2/20	Thu 23/7/20	Thu 6/2/20	NA	Thu 6/2/20	Mon 28/9/20		0.5 days	259		+								
61	Prepare DDA for and ICE certification (Final)	15 days 0 days	15 days	0%	Fri 24/7/20	Fri 7/8/20	NA	NA	Tue 29/9/20	Tue 13/10/20	67 days	1 day	260,258FF+21	d									
62	Submit & endorse by PM and Statutory Authorities/Gov. Dept	50 days 0 days	50 days	0%	Sat 8/8/20	Sat 26/9/20	NA	NA	Wed 14/10/20	Wed 2/12/20	67 days	1 day	261										
263	Underpass (E&M Works)	392 days 0 days	392 days	0%	Mon 3/8/20	Sun 29/8/21	NA	NA	Tue 10/11/20	Wed 11/1/23	99 days							<b>-</b>					
264	Prepare AIP (E&M works) and ICE certification (Draft)	32 days 0 days	32 days	0%	Mon 5/10/20	Thu 5/11/20	NA	NA	Tue 10/11/20	Fri 11/12/20	36 days	2 days											
	Task	Summary		Inactive M	filestone 🔷		Duration-or	nly		Start-only		E	Ex	temal Miles	tone	*	<u> </u>	Critical	Split				
	22-May-20 Split	Project Summary		Inactive Su	ummary		Manual Sur	mmary Rollup		Finish-only		]	De	eadline		<b>+</b>		Progress				r	
	Milestone •	Inactive Task		Manual Ta	ask		Manual Sur	mmary		External Tas	sks		Cr	itical				Manual	Progress				

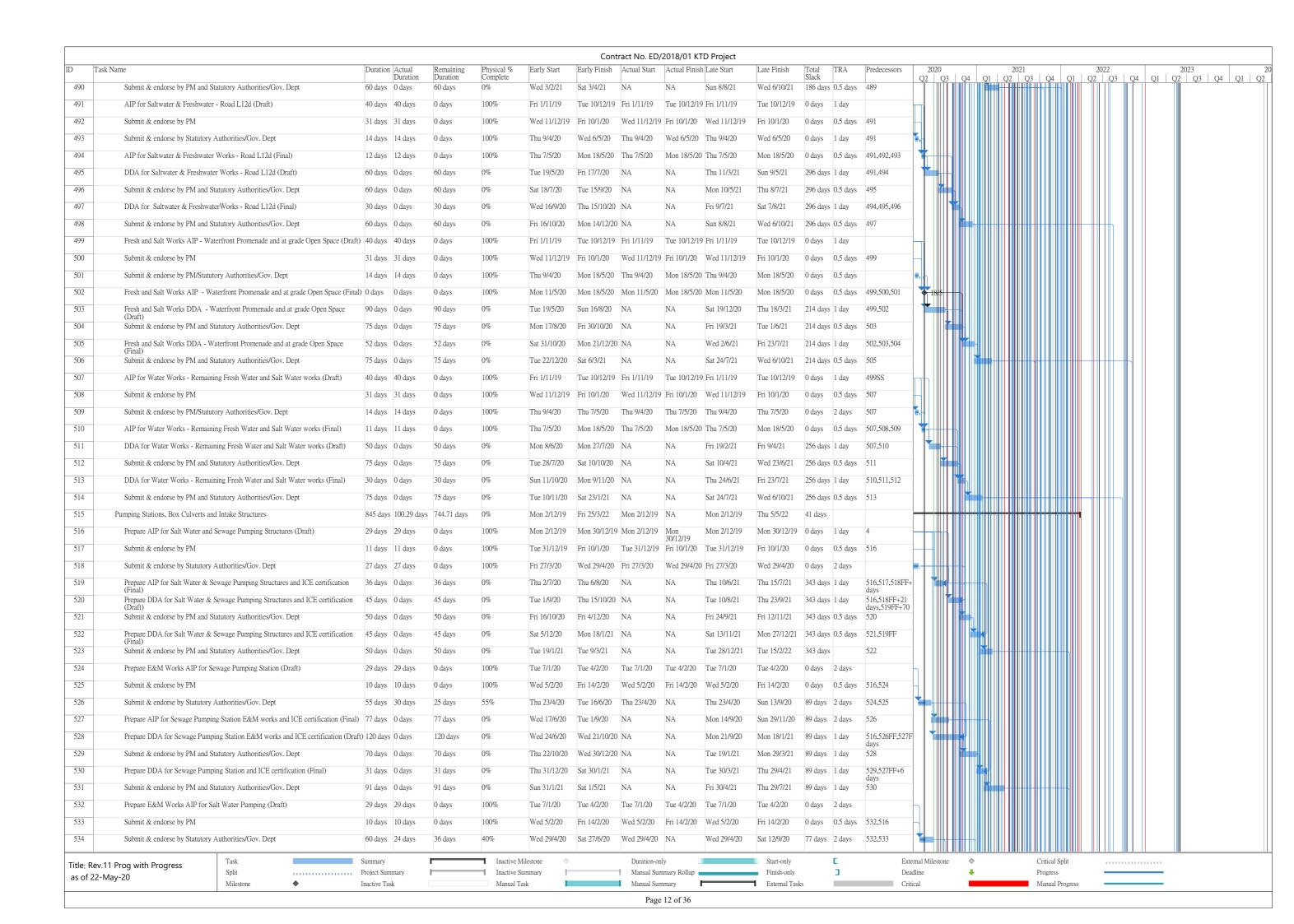
						Con	tract No. ED/	/2018/01 K	TD Project													
	Task Name	Duration Actual Duration	Remaining Duration	Physical % Complete	Early Start	Early Finish	Actual Start	Actual Finis	h Late Start	Late Finish	Total Slack	TRA	Predecessors	2020	2   04	01   6	2021	04 01	2022	12   04   6	2023	2   04   0
265	Submit & endorse by PM and Statutory Authorities/Gov. Dept	62 days 0 days	62 days	O%	Fri 6/11/20	Wed 6/1/21	NA	NA	Sat 12/12/20	Thu 11/2/21	36 days	2 days	264	Q2 Q	5 Q4	Q1 (	Q2   Q3	Q4   Q1	Q2   Q	5 Q4 Q	Q1   Q2   Q	25   Q4   C
266	Prepare AIP (E&M works) and ICE certification (Final)	32 days 0 days	32 days	0%	Thu 7/1/21	Sun 7/2/21	NA	NA	Fri 12/2/21	Mon 15/3/21	36 days	2 days	265									
267	Submit & endorse by PM and Statutory Authorities/Gov. Dept	62 days 0 days	62 days	0%	Mon 8/2/21	Sat 10/4/21	NA	NA	Tue 16/3/21	Sun 16/5/21	36 days	1	266									
268	Prepare DDA (E&M works) and ICE certification (Draft)	32 days 0 days	32 days	0%	Wed 10/3/21	Sat 10/4/21		NA	Thu 15/4/21	Sun 16/5/21	36 days		267FF									
69	Submit & endorse by PM and Statutory Authorities/Gov. Dept	62 days 0 days	62 days	0%	Sun 11/4/21		NA	NA	Mon 17/5/21	Sat 17/7/21	36 days		268									
70	Prepare DDA (E&M works) and ICE certification (Final)	17 days 0 days		0%	Sat 12/6/21	Mon 28/6/21		NA	Sun 18/7/21	Tue 3/8/21	36 days		269									
			17 days																			
71	Submit & endorse by PM and Statutory Authorities/Gov. Dept	62 days 0 days	62 days	0%	Tue 29/6/21	Sun 29/8/21		NA	Wed 4/8/21	Mon 4/10/21	36 days		270									
72	Prepare AIP (E&M works) and Architectural Finishes of of Underpass (Road L14) and ICE certification (Draft)	31 days 0 days	31 days	0%	Mon 3/8/20	Wed 2/9/20	NA	NA	Thu 31/3/22	Sat 30/4/22	605 days	1 day			Ь							
73	Submit & endorse by PM and Statutory Authorities/Gov. Dept	51 days 0 days	51 days	0%	Thu 3/9/20	Fri 23/10/20	NA	NA	Sun 1/5/22	Mon 20/6/22	605 days	1 day	272									
74	Prepare AIP (E&M works )and Architectural Finishes of of Underpass (Road L14) and ICE certification (Final)	14 days 0 days	14 days	0%	Sat 24/10/20	Fri 6/11/20	NA	NA	Tue 21/6/22	Mon 4/7/22	605 days	2 days	273									
5	Submit & endorse by PM and Statutory Authorities/Gov. Dept	74 days 0 days	74 days	0%	Sat 7/11/20	Tue 19/1/21	NA	NA	Tue 5/7/22	Fri 16/9/22	605 days	1 day	274									
6	Prepare DDA (E&M works) and Architectural Finishes of of Underpass (Road L14) and ICE certification (Draft)	31 days 0 days	31 days	0%	Sun 20/12/20	Tue 19/1/21	NA	NA	Wed 17/8/22	Fri 16/9/22	605 days	1 day	275FF									
7	Submit & endorse by PM and Statutory Authorities/Gov. Dept	51 days 0 days	51 days	0%	Wed 20/1/21	Thu 11/3/21	NA	NA	Sat 17/9/22	Sun 6/11/22	605 days	1 day	276									
78	Prepare DDA (E&M works) and Architectural Finishes of of Underpass (Road	15 days 0 days	15 days	0%	Fri 12/3/21	Fri 26/3/21	NA	NA	Mon 7/11/22	Mon 21/11/22	605 days	1 day	277			i i i						
9	L14) and ICE certification (Final)  Submit & endorse by PM and Statutory Authorities/Gov. Dept	51 days 0 days	51 days	0%	Sat 27/3/21	Sun 16/5/21	NA	NA	Tue 22/11/22	Wed 11/1/23	605 days	1 day	278									
80	E&M Work for Pump House of Underpass D3	364 days 83.71 days	280.29 days	0%	Mon 24/2/20	Sun 21/2/21	Mon 24/2/20	NA	Mon 24/2/20	Wed 18/8/21	178 days											
1	Prepare AIP (E&M works) Submission (Draft)	11 days 11 days	0 days	0%	Mon 24/2/20	Thu 5/3/20	Mon 24/2/20		Mon 24/2/20	Thu 5/3/20	0 days											
2				49%									201									
	Submit & endorse by PM and Statutory Authorities/Gov. Dept	160 days 78 days	82 days		Fri 6/3/20	Wed 12/8/20		NA	Fri 6/3/20	Sat 15/8/20	-	2 days	281									
3	Prepare AIP (E&M works) and ICE certification (Final)	21 days 0 days	21 days	0%	Thu 13/8/20	Wed 2/9/20		NA	Sun 16/8/20	Sat 5/9/20		2 days	282,44FF+12 da									
4	Submit & endorse by PM and Statutory Authorities/Gov. Dept	50 days 0 days	50 days	0%	Thu 3/9/20	Thu 22/10/20	NA	NA	Sun 6/9/20	Sun 25/10/20	3 days	2 days	283									
5	Prepare DDA (E&M works) and ICE certification (Draft)	30 days 0 days	30 days	0%	Wed 30/9/20	Thu 29/10/20	NA	NA	Sat 3/10/20	Sun 1/11/20	3 days	2 days	284FF+7 days									
6	Submit & endorse by PM and Statutory Authorities/Gov. Dept	50 days 0 days	50 days	0%	Fri 30/10/20	Fri 18/12/20	NA	NA	Mon 2/11/20	Mon 21/12/20	3 days	2 days	285									
7	Prepare DDA (E&M works) and ICE certification (Final)	15 days 0 days	15 days	0%	Sat 19/12/20	Sat 2/1/21	NA	NA	Tue 22/12/20	Tue 5/1/21	3 days	2 days	286			<b>4</b>						
8	Submit & endorse by PM and Statutory Authorities/Gov. Dept	50 days 0 days	50 days	0%	Sun 3/1/21	Sun 21/2/21	NA	NA	Wed 30/6/21	Wed 18/8/21	178 days	2 days	287									
39	Depressed Road (North) Structure	463 days 335.18 days	s 127.82 days	0%	Thu 16/5/19	Thu 20/8/20	Thu 16/5/19	NA	Thu 16/5/19	Thu 11/5/23	994 days											
0	Prepare AIP and ICE certification (Draft)	65 days 65 days	0 days	100%	Thu 16/5/19	Fri 2/8/19	Thu 16/5/19	Fri 2/8/19	Thu 16/5/19	Fri 2/8/19	0 days	1 days	4									
1	Submit & endorse by PM and Statutory Authorities/Gov. Dept	33 days 33 days	0 days	100%	Sat 3/8/19	Wed 4/9/19	Sat 3/8/19	Wed 4/9/19	Sat 3/8/19	Wed 4/9/19	0 days	2 days	290									
92	Prepare AIP and ICE certification (Final)	44 days 44 days	0 days	100%	Mon 9/12/19	Tue 21/1/20	Mon 9/12/19	Tue 21/1/20	Mon 9/12/19	Tue 21/1/20	0 days	0 days	291									
93	Prepare DDA and ICE certification (Draft)	57 days 57 days	0 days	100%	Tue 24/9/19	Tue 19/11/19	Tue 24/9/19	Tue 19/11/1	9 Tue 24/9/19	Tue 19/11/19	0 days	5 days	290									
)4	Submit & endorse by PM	17 days 17 days	0 days	100%	Tue 19/11/19				Tue 19/11/19	Thu 5/12/19	-	1 day	293									
95	Submit & endorse by Statutory Authorities/Gov. Dept				Wed 19/2/20	Mon 9/3/20			Wed 19/2/20	Mon 9/3/20			293									
		20 days 20 days	0 days	100%							1	1 day										
96	Prepare DDA for and ICE certification (Final)	30 days 0 days	30 days	0%	Sat 23/5/20	Sun 21/6/20		NA	Sat 11/2/23	Sun 12/3/23	994 days		294,292FF,295									
17	Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days 0 days	60 days	0%	Mon 22/6/20	Thu 20/8/20		NA	Mon 13/3/23	Thu 11/5/23	994 days	5 days	296									
8	Depressed Road (North) E&M Works	322 days 0 days	322 days	0%	Mon 21/9/20	Sun 8/8/21	NA	NA	Tue 17/11/20	Mon 4/10/21	57 days											
19	Prepare AIP (E&M works) and ICE certification (Draft)	31 days 0 days	31 days	0%	Mon 21/9/20	Wed 21/10/20	) NA	NA	Tue 17/11/20	Thu 17/12/20	57 days	1 day										
00	Submit & endorse by PM and Statutory Authorities/Gov. Dept	61 days 0 days	61 days	0%	Thu 22/10/20	Mon 21/12/20	) NA	NA	Fri 18/12/20	Tue 16/2/21	57 days	1 day	299									
)1	Prepare AIP (E&M works) and ICE certification (Final)	31 days 0 days	31 days	0%	Tue 22/12/20	Thu 21/1/21	NA	NA	Wed 17/2/21	Fri 19/3/21	57 days	1 day	300									
)2	Submit & endorse by PM and Statutory Authorities/Gov. Dept	61 days 0 days	61 days	0%	Fri 22/1/21	Tue 23/3/21	NA	NA	Sat 20/3/21	Wed 19/5/21	57 days	1 day	301									
)3	Prepare DDA (E&M works) and ICE certification (Draft)	31 days 0 days	31 days	0%	Sun 21/2/21	Tue 23/3/21	NA	NA	Mon 19/4/21	Wed 19/5/21	57 days	1 day	302FF									
14	Submit & endorse by PM and Statutory Authorities/Gov. Dept	61 days 0 days	61 days	0%	Wed 24/3/21	Sun 23/5/21		NA	Thu 20/5/21	Mon 19/7/21			303									
15	Prepare DDA (E&M works) and ICE certification (Final)	16 days 0 days	16 days	0%	Mon 24/5/21	Tue 8/6/21		NA	Tue 20/7/21	Wed 4/8/21	57 days		304									
)6	Submit & endorse by PM and Statutory Authorities/Gov. Dept	61 days 0 days	61 days	0%	Wed 9/6/21		NA	NA	Thu 5/8/21	Mon 4/10/21			305									
												1 uay	505					]				
07	Depressed Road (South) and Substructure of Elevated Landscape Deck	463 days 333.16 days		0%	Mon 10/6/19		Mon 10/6/19		Mon 10/6/19	Thu 15/10/20												
08	Prepare AIP and ICE certification (Draft)	54 days 54 days	0 days	100%	Mon 10/6/19	Fri 2/8/19	Mon 10/6/19		Mon 10/6/19	Fri 2/8/19	0 days	1 days										
809	Submit & endorse by PM and Statutory Authorities/Gov. Dept	81 days 81 days	0 days	100%	Sat 3/8/19	Tue 22/10/19	Sat 3/8/19	Tue 22/10/1	9 Sat 3/8/19	Tue 22/10/19	0 days	2 days	308									
le: D	ev.11 Prog with Progress	Summary		Inactive M	ilestone 🔷		Duration-or	ıly		Start-only		E	Exte	mal Mileston	e 🔷	-MIN II I I II I	<u> </u>	Critical Split				
	22-May-20	Project Summary		Inactive Su				mmary Rollup		Finish-only		3		dline	4			Progress	_		_	
_	Milestone ♦	Inactive Task		Manual Ta	sk		Manual Sur	nmary	r -	External Tas	sks		Criti	ical				Manual Progress	s			

							Con	tract No. ED/	/2018/01 K	TD Project																
Task	Name	Duration	n Actual Duration	Remaining Duration	Physical % Complete	Early Start	Early Finish	Actual Start	Actual Finis	h Late Start	Late Finish	Total TRA Slack	Predecessors 202		04 /	01   6	2021	3   04	01	1 01	2022	1 0	1 01	2	2023   Q3	_
10	Prepare AIP and ICE (certification (Final)	270 days	s 222 days	48 days	82%	Tue 15/10/19	Fri 10/7/20	Tue 15/10/19	NA	Tue 15/10/19	Mon 10/8/20	31 days 0 days	309,44FF+12 da		<u>Q4</u>   (					Q2			- Q1		Q5	
311	Prepare DDA certification (Draft)	27 days	27 days	0 days	100%	Mon 10/2/20	Sat 7/3/20	Mon 10/2/20	Sat 7/3/20	Mon 10/2/20	Sat 7/3/20	0 days 5 days	308													
312	Submit & endorse by PM and Statutory Authorities/Gov. Dept	75 days	24 days	51 days	32%	Wed 29/4/20	Thu 16/7/20	Wed 29/4/20	NA	Wed 29/4/20	Sun 16/8/20	31 days 1 days	311,310FF+6													
313	Prepare DDA for and ICE certification (Final)	10 days	0 days	10 days	0%	Fri 17/7/20	Sun 26/7/20	NA	NA	Mon 17/8/20	Wed 26/8/20	31 days 0.5 days	312	K												
314	Submit & endorse by PM and Statutory Authorities/Gov. Dept	50 days	0 days	50 days	0%	Mon 27/7/20	Mon 14/9/20	NA	NA	Thu 27/8/20	Thu 15/10/20	31 days 0.5 days	313					$\parallel \parallel \parallel$								
315	South Depressed Road (E&M Works)	382 days	s 0 days	382 days	0%	Mon 7/9/20	Thu 23/9/21	NA	NA	Fri 18/9/20	Mon 4/10/21	11 days						<b>-</b>								
316	Prepare AIP (E&M works) and ICE certification (Draft)	31 days	0 days	31 days	0%	Mon 7/9/20	Wed 7/10/20	NA	NA	Fri 18/9/20	Sun 18/10/20	11 days 1 day														
317	Submit & endorse by PM and Statutory Authorities/Gov. Dept	76 days	0 days	76 days	0%	Thu 8/10/20	Tue 22/12/20	NA	NA	Mon 19/10/20	Sat 2/1/21	11 days 1 day	316													
18	Prepare AIP (E&M works) and ICE certification (Final)	31 days	0 days	31 days	0%	Wed 23/12/20	Fri 22/1/21	NA	NA	Sun 3/1/21	Tue 2/2/21	11 days 1 day	317		•											
19	Submit & endorse by PM and Statutory Authorities/Gov. Dept	76 days		76 days	0%	Sat 23/1/21	Thu 8/4/21	NA	NA	Wed 3/2/21	Mon 19/4/21	11 days 1 day	318		<b> </b>			ļ								
20	Prepare DDA (E&M works) and ICE certification (Draft)	31 days		31 days	0%	Tue 9/3/21	Thu 8/4/21	NA	NA	Sat 20/3/21	Mon 19/4/21	11 days 1 day	319FF					ļ								
21	Submit & endorse by PM and Statutory Authorities/Gov. Dept	76 days		76 days	0%	Fri 9/4/21	Wed 23/6/21		NA	Tue 20/4/21	Sun 4/7/21	11 days 1 day	320					ļ								
			,																							
22	Prepare DDA (E&M works) and ICE certification (Final)	16 days		16 days	0%	Thu 24/6/21	Fri 9/7/21	NA	NA	Mon 5/7/21	Tue 20/7/21	11 days 1 day	321													
23	Submit & endorse by PM and Statutory Authorities/Gov. Dept	76 days		76 days	0%	Sat 10/7/21	Thu 23/9/21		NA	Wed 21/7/21	Mon 4/10/21	11 days 1 day	322						4							
24	Road Works (Civil Works)	-		465.99 days	0%	Tue 13/8/19	Fri 4/6/21	Tue 13/8/19		Tue 13/8/19	Tue 14/12/21	193 days														
25	Prepare AIP for At-grade Road D3 and ICE certification (Draft)	57 days	57 days	0 days	100%	Tue 13/8/19	Tue 8/10/19	Tue 13/8/19	Tue 8/10/19	Tue 13/8/19	Tue 8/10/19	0 days 1 day	293SS+75 days													
26	Submit & endorse by PM	21 days	21 days	0 days	100%	Wed 9/10/19	Tue 29/10/19	Wed 9/10/19	Tue 29/10/19	Wed 9/10/19	Tue 29/10/19	0 days 0.5 days	325													
27	Submit & endorse by Statutory Authorities/Gov. Dept	24 days	24 days	0 days	100%	Wed 30/10/19	Fri 22/11/19	Wed 30/10/19	Fri 22/11/19	Wed 30/10/19	Fri 22/11/19	0 days 1 day	325													
28	Prepare AIP for At-grade Road D3 and ICE certification (Final)	57 days	57 days	0 days	100%	Thu 5/3/20	Mon 4/5/20	Thu 5/3/20	Mon 4/5/20	Thu 5/3/20	Mon 4/5/20	0 days 0 days	326FS+12 days,327,44FF+1													
29	Prepare DDA for At-grade Road D3 and ICE certification (Draft)	210 days	s 0 days	210 days	0%	Sat 23/5/20	Fri 18/12/20	NA	NA	Wed 2/12/20	Tue 29/6/21	193 days 5 days	325FS+100													
30	Submit & endorse by PM and Statutory Authorities/Gov. Dept	75 days	0 days	75 days	0%	Sat 19/12/20	Wed 3/3/21	NA	NA	Wed 30/6/21	Sun 12/9/21	193 days 0.5 days	days,328FF+6 329			-										
31	Prepare DDA for At-grade Road D3 and ICE certification (Final)	16 days	0 days	16 days	0%	Thu 4/3/21	Fri 19/3/21	NA	NA	Mon 13/9/21	Tue 28/9/21	193 days 1 day	330													
32	Submit & endorse by PM and Statutory Authorities/Gov. Dept	77 days	0 days	77 days	0%	Sat 20/3/21	Fri 4/6/21	NA	NA	Wed 29/9/21	Tue 14/12/21	193 days 2 days	331													
33	Remaining Road Works (E&M Works)	382 days		382 days	0%	Mon 5/10/20	Thu 21/10/21	NA	NA	Sat 13/2/21	Tue 1/3/22	131 days														
34	Prepare AIP (E&M works) and ICE certification (Draft)	31 days		31 days	0%	Mon 5/10/20	Wed 4/11/20		NA	Sat 13/2/21	Mon 15/3/21	131 days 1 day														
35	Submit & endorse by PM and Statutory Authorities/Gov. Dept	76 days		76 days	0%	Thu 5/11/20	Tue 19/1/21		NA	Tue 16/3/21	Sun 30/5/21	131 days 1 day	334		Į <u>.                                    </u>											
36	Prepare AIP (E&M works) and ICE certification (Final)	31 days	1		0%	Wed 20/1/21	Fri 19/2/21		NA	Mon 31/5/21	Wed 30/6/21	131 days 1 day	335													
				31 days																						
37	Submit & endorse by PM and Statutory Authorities/Gov. Dept	76 days		76 days	0%	Sat 20/2/21		NA	NA	Thu 1/7/21	Tue 14/9/21	131 days 1 day	336													
38	Prepare DDA (E&M works) and ICE certification (Draft)	31 days		31 days	0%	Tue 6/4/21		NA	NA	Sun 15/8/21		131 days 1 day	337FF													
339	Submit & endorse by PM and Statutory Authorities/Gov. Dept	76 days	0 days	76 days	0%	Fri 7/5/21	Wed 21/7/21	NA	NA	Wed 15/9/21	Mon 29/11/21	131 days 1 day	338													
40	Prepare DDA (E&M works) and ICE certification (Final)	16 days	0 days	16 days	0%	Thu 22/7/21	Fri 6/8/21	NA	NA	Tue 30/11/21	Wed 15/12/21	131 days 1 day	339													
341	Submit & endorse by PM and Statutory Authorities/Gov. Dept	76 days	0 days	76 days	0%	Sat 7/8/21	Thu 21/10/21	NA	NA	Thu 16/12/21	Tue 1/3/22	131 days 1 day	340													
342	Road L12d Works (Roadworks)	791 days	s 261.27 days	529.73 days	0%	Tue 6/8/19	Mon 4/10/21	Tue 6/8/19	NA	Tue 6/8/19	Tue 28/2/23	512 days						<b>#1</b>								
43	Prepare AIP for Road L12d Submission (Draft)	64 days	64 days	0 days	100%	Tue 6/8/19	Tue 8/10/19	Tue 6/8/19	Tue 8/10/19	Tue 6/8/19	Tue 8/10/19	0 days 1 day	325		+											
44	Submit & endorse by PM and Statutory Authorities/Gov. Dept	377 days	s 227 days	150 days	60%	Wed 9/10/19	Mon 19/10/20	0 Wed 9/10/19	NA	Wed 9/10/19	Tue 15/3/22	512 days														
45		120 days	s 0 days	120 days	0%	Tue 20/10/20	Tue 16/2/21	NA	NA	Wed 16/3/22	Wed 13/7/22	512 days 0 days	343,44FF+12			4										
46	(Final)  Prepare DDA for Road L12d (Include E&M Provision Works) and ICE certification	120 days	s 0 days	120 days	0%	Thu 19/11/20	Thu 18/3/21	NA	NA	Fri 15/4/22	Fri 12/8/22	512 days 1 day	days,344 343FS+260		<b>T</b>											
347	(Draft) Submit & endorse by PM and Statutory Authorities/Gov. Dept	75 days	0 days	75 days	0%	Fri 19/3/21	Tue 1/6/21	NA	NA	Sat 13/8/22		512 days 0.5 days	days,345FF+30 346													
48	Prepare DDA for Road L12d (Include E&M Provision Works) and ICE certification			50 days	0%	Wed 2/6/21	Wed 21/7/21		NA	Thu 27/10/22		512 days 0 days	347,345FF													
49	(Final)  Submit & endorse by PM and Statutory Authorities/Gov. Dept		0 days	75 days	0%	Thu 22/7/21	Mon 4/10/21		NA	Fri 16/12/22	Tue 28/2/23	512 days 0 days														
50	Road Lighting of Road D3 (E&M)			339.81 days	0%	Mon 6/1/20	Sun 18/4/21	Mon 6/1/20		Mon 6/1/20	Sun 1/8/21	105 days	J-10													
51	Prepare AIP (E&M works) Submission (Draft)		30 days	0 days	100%	Mon 6/1/20	Tue 4/2/20		Tue 4/2/20	Mon 6/1/20	Tue 4/2/20	0 days 2 days	251													
352	Submit & endorse by Statutory Authorities/Gov. Dept and PM		s 108 days	82 days	57%	Wed 5/2/20		Wed 5/2/20		Wed 5/2/20	Wed 25/11/20		351													
353	Prepare AIP (E&M works) and ICE certification (Final)	32 days	0 days	32 days	0%	Thu 13/8/20	Sun 13/9/20		NA	Thu 26/11/20	Sun 27/12/20	105 days 2 days	352													
354	Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days	0 days	60 days	0%	Mon 14/9/20	Thu 12/11/20	NA NA	NA	Mon 28/12/20	Thu 25/2/21	105 days 2 days	353													
tle. Rev 1	1 Prog with Progress	Summary			Inactive Mi	ilestone $\Diamond$		Duration-on	ıly		Start-only	Е	External Mile	stone	<b>\$</b>		-m 1 III	Critical	Split							_
INCV. I	ay-20 Split	Project Sun	mmary		Inactive Su	mmary		Manual Sur	mmary Rollup 🛭		Finish-only	3	Deadline		•			Progress	śS		_			-		

Task								tract No. ED,													
Task	x Name	Duration	Actual Duration	Remaining Duration	Physical % Complete	Early Start	Early Finish	Actual Start	Actual Finis	h Late Start	Late Finish	Total TRA Slack	Predecessors	2020 Q2	Q3   Q4	Q1   Q	2021 2   Q3	Q4 O	202		2023 Q1   Q2   Q3
355	Prepare DDA (E&M works) and ICE certification (Draft)	32 days		32 days	0%	Mon 12/10/20	Thu 12/11/20	NA	NA	Mon 25/1/21	Thu 25/2/21	105 days 2 days	354FF								
356	Submit & endorse by PM and Statutory Authorities/Gov. Dept	77 days	0 days	77 days	0%	Fri 13/11/20	Thu 28/1/21	NA	NA	Fri 26/2/21	Thu 13/5/21	105 days 2 days	355								
357	Prepare DDA (E&M works) and ICE certification (Final)	3 days	0 days	3 days	0%	Fri 29/1/21	Sun 31/1/21	NA	NA	Fri 14/5/21	Sun 16/5/21	105 days 2 days	356			T III					
358	Submit & endorse by PM and Statutory Authorities/Gov. Dept	77 days	0 days	77 days	0%	Mon 1/2/21	Sun 18/4/21	NA	NA	Mon 17/5/21	Sun 1/8/21	105 days 2 days	357			<b>         </b>		++++			
359	Road L12d Works (E&M Works)	329 days	0 days	329 days	0%	Mon 5/10/20	Sun 29/8/21	NA	NA	Mon 1/2/21	Sun 26/12/21	119 days									
360	Prepare AIP (E&M works) and ICE certification (Draft)	32 days	0 days	32 days	0%	Mon 5/10/20	Thu 5/11/20	NA	NA	Mon 1/2/21	Thu 4/3/21	119 days 2 days									
361	Submit & endorse by PM and Statutory Authorities/Gov. Dept	62 days	0 days	62 days	0%	Fri 6/11/20	Wed 6/1/21	NA	NA	Fri 5/3/21	Wed 5/5/21	119 days 2 days	360								
362	Prepare AIP (E&M works) and ICE certification (Final)	32 days		32 days	0%	Thu 7/1/21	Sun 7/2/21	NA	NA	Thu 6/5/21	Sun 6/6/21	119 days 2 days									
363	Submit & endorse by PM and Statutory Authorities/Gov. Dept	62 days		62 days	0%	Mon 8/2/21	Sat 10/4/21		NA	Mon 7/6/21	Sat 7/8/21	119 days 2 days									
364	Prepare DDA (E&M works) and ICE certification (Draft)	32 days		32 days	0%	Wed 10/3/21		NA	NA	Wed 7/7/21	Sat 7/8/21	119 days 2 days	363FF								
365																					
	Submit & endorse by PM and Statutory Authorities/Gov. Dept	62 days		62 days	0%	Sun 11/4/21		NA	NA	Sun 8/8/21	Fri 8/10/21	119 days 2 days									
366	Prepare DDA (E&M works) and ICE certification (Final)	17 days		17 days	0%	Sat 12/6/21	Mon 28/6/21		NA	Sat 9/10/21	Mon 25/10/21										
367	Submit & endorse by PM and Statutory Authorities/Gov. Dept	62 days		62 days	0%	Tue 29/6/21	Sun 29/8/21		NA	Tue 26/10/21	Sun 26/12/21	119 days 2 days	366							<b>│                                    </b>	
368	Roadworks other than at-grade Road D3 and Road L12d (Civil Works)	609 days	238.54 days	370.46 days	0%	Mon 2/9/19	Sun 2/5/21	Mon 2/9/19	NA	Mon 2/9/19	Sun 23/5/21	21 days									
369	AIP for Roadworks - Roadworks other than at-grade Road D3 and Road L12d (Draft)	36 days	36 days	0 days	100%	Mon 2/9/19	Mon 7/10/19	Mon 2/9/19	Mon 7/10/19	9 Mon 2/9/19	Mon 7/10/19	0 days 0.5 days	S								
370	Submit & endorse by PM and Statutory Authorities/Gov. Dept	288 days	228 days	60 days	79%	Tue 8/10/19	Tue 21/7/20	Tue 8/10/19	NA	Tue 8/10/19	Tue 11/8/20	21 days 0.5 days	s 369								
371	AIP for Roadworks - Roadworks other than at-grade Road D3 and Road L12d (Final)	75 days	0 days	75 days	0%	Wed 22/7/20	Sun 4/10/20	NA	NA	Wed 12/8/20	Sun 25/10/20	21 days 0.5 days	370,44FF+12								
372	DDA for Roadworks - Roadworks other than at-grade Road D3 and Road L12d (Draft)	95 days	0 days	95 days	0%	Sat 1/8/20	Tue 3/11/20	NA	NA	Sat 22/8/20	Tue 24/11/20	21 days 1 day	371FF+30 day	ys							
373	Submit & endorse by PM and Statutory Authorities/Gov. Dept	75 days	0 days	75 days	0%	Wed 4/11/20	Sun 17/1/21	NA	NA	Wed 25/11/20	Sun 7/2/21	21 days 0.5 days	s 372								
374	DDA for Roadworks - Roadworks other than at-grade Road D3 and Road L12d	30 days	0 days	30 days	0%	Mon 18/1/21	Tue 16/2/21	NA	NA	Mon 8/2/21	Tue 9/3/21	21 days 0.5 days	s 371,372,373								
375	(Final) Submit & endorse by PM and Statutory Authorities/Gov. Dept	75 days	0 days	75 days	0%	Wed 17/2/21	Sun 2/5/21	NA	NA	Wed 10/3/21	Sun 23/5/21	21 days 0.5 days	s 374								
376	Roadworks - EVA to Sewerage and Saltwater Pumping Station (Civil Works)	413 days	s 68.26 days	344.74 days	0%	Wed 4/3/20	Tue 20/4/21	Wed 4/3/20	NA	Wed 4/3/20	Fri 17/2/23	668 days									
377	AIP for Roadworks - EVA to Sewerage and Saltwater Pumping Station (Draft)		46 days	0 days	100%	Wed 4/3/20	Sat 18/4/20	Wed 4/3/20	Sat 18/4/20		Sat 18/4/20	0 days 0.5 days	\$								
378	Submit & endorse by PM and Statutory Authorities/Gov. Dept		33 days	49 days	40%	Sat 18/4/20			NA	Sat 18/4/20	Mon 23/5/22	684 days	377								
379																					
	AIP for Roadworks - EVA to Sewerage and Saltwater Pumping Station (Final)	75 days	-	75 days	0%	Thu 9/7/20	Mon 21/9/20		NA	Tue 24/5/22	Sat 6/8/22	684 days 0.5 days									
380	DDA for Roadworks - EVA to Sewerage and Saltwater Pumping Station (Draft)	95 days		95 days	0%	Mon 20/7/20	Thu 22/10/20		NA	Thu 19/5/22	Sun 21/8/22	668 days 1 day	379FF+15 day	ys							
381	Submit & endorse by PM and Statutory Authorities/Gov. Dept	75 days		75 days	0%	Fri 23/10/20	Tue 5/1/21		NA	Mon 22/8/22	Fri 4/11/22	668 days 0.5 days									
382	DDA for Roadworks - EVA to Sewerage and Saltwater Pumping Station (Final)	30 days	_	30 days	0%	Wed 6/1/21	Thu 4/2/21	NA	NA	Sat 5/11/22	Sun 4/12/22	668 days 0.5 days									
383	Submit & endorse by PM and Statutory Authorities/Gov. Dept	75 days	0 days	75 days	0%	Fri 5/2/21	Tue 20/4/21	NA	NA	Mon 5/12/22	Fri 17/2/23	668 days 0.5 days	s 382								
384	Road Lighting of Road other than Road D3 (E&M)	356 days	0 days	356 days	0%	Fri 29/5/20	Wed 19/5/21	NA	NA	Tue 2/6/20	Sun 23/5/21	4 days									
385	Prepare AIP (E&M works) and ICE certification (Draft)	38 days	0 days	38 days	0%	Fri 29/5/20	Sun 5/7/20	NA	NA	Tue 2/6/20	Thu 9/7/20	4 days 2 days									
386	Submit & endorse by PM and Statutory Authorities/Gov. Dept	77 days	0 days	77 days	0%	Mon 6/7/20	Sun 20/9/20	NA	NA	Fri 10/7/20	Thu 24/9/20	4 days 2 days	385								
387	Prepare AIP (E&M works) and ICE certification (Final)	32 days	0 days	32 days	0%	Mon 21/9/20	Thu 22/10/20	NA	NA	Fri 25/9/20	Mon 26/10/20	4 days 2 days	386		i i						
388	Submit & endorse by PM and Statutory Authorities/Gov. Dept	62 days	0 days	62 days	0%	Fri 23/10/20	Wed 23/12/20	NA	NA	Tue 27/10/20	Sun 27/12/20	4 days 2 days	387	$-\parallel\parallel\parallel$		+					
389	Prepare DDA (E&M works) and ICE certification (Draft)	32 days	0 days	32 days	0%	Sun 22/11/20	Wed 23/12/20	) NA	NA	Thu 26/11/20	Sun 27/12/20	4 days 2 days	388FF	$-\parallel\parallel\parallel$							
390	Submit & endorse by PM and Statutory Authorities/Gov. Dept	62 days	0 days	62 days	0%	Thu 24/12/20	Tue 23/2/21	NA	NA	Mon 28/12/20	Sat 27/2/21	4 days 2 days	389	$-\parallel\parallel\parallel$							
391	Prepare DDA (E&M works) and ICE certification (Final)	23 days		23 days	0%	Wed 24/2/21	Thu 18/3/21		NA	Sun 28/2/21	Mon 22/3/21	4 days 2 days		$-\parallel\parallel\parallel$							
392	Submit & endorse by PM and Statutory Authorities/Gov. Dept	62 days		62 days	0%	Fri 19/3/21	Wed 19/5/21		NA	Tue 23/3/21	Sun 23/5/21	4 days 2 days		$-\parallel\parallel\parallel$							
393	Roadworks other than at-grade Road D3 and Road L12d (E&M Works)	322 days		322 days	0%	Thu 2/7/20	Wed 19/5/21		NA	Mon 6/7/20	Sun 23/5/21	4 days									
														_    [							
394	Prepare AIP (E&M works) and ICE certification (Draft)	31 days		31 days	0%	Thu 2/7/20		NA	NA	Mon 6/7/20	Wed 5/8/20	4 days 1 day	20.1								
395	Submit & endorse by PM and Statutory Authorities/Gov. Dept	61 days		61 days	0%	Sun 2/8/20	Thu 1/10/20		NA	Thu 6/8/20	Mon 5/10/20	4 days 1 day	394								
396	Prepare AIP (E&M works) and ICE certification (Final)	31 days	0 days	31 days	0%	Fri 2/10/20	Sun 1/11/20	NA	NA	Tue 6/10/20	Thu 5/11/20	4 days 1 day	395								
397	Submit & endorse by PM and Statutory Authorities/Gov. Dept	61 days	0 days	61 days	0%	Mon 2/11/20	Fri 1/1/21	NA	NA	Fri 6/11/20	Tue 5/1/21	4 days 1 day	396								
398	Prepare DDA (E&M works) and ICE certification (Draft)	31 days	0 days	31 days	0%	Wed 2/12/20	Fri 1/1/21	NA	NA	Sun 6/12/20	Tue 5/1/21	4 days 1 day	397FF								
399	Submit & endorse by PM and Statutory Authorities/Gov. Dept	61 days	0 days	61 days	0%	Sat 2/1/21	Wed 3/3/21	NA	NA	Wed 6/1/21	Sun 7/3/21	4 days 1 day	398								
:41- D -	1 Days with Days and Task	Summary	1		Inactive Mil	lestone $\Diamond$	1	Duration-or	ıly		Start-only	E	F	External Milesto	ne <	<u> </u>		ritical Split	11(1)		
itle: Rev.1 as of 22-N	1 Prog with Progress	Project Sun	nmary		Inactive Sur				mmary Rollup		Finish-only	3		Deadline	10 4			rogress			_
	Milestone •	Inactive Ta	sk		Manual Tas	k 📗		Manual Sur	nmary		External Tas	sks		Critical			M	anual Progra	ess		_

							Cont	tract No. ED/	/2018/01 KT	D Project									
Task	Name	Duration	Actual Duration	Remaining Duration	Physical % Complete	Early Start	Early Finish	Actual Start	Actual Finish	Late Start	Late Finish	Total TRA Slack	Predecessors		)3   Q4	2021 Q1   Q2   Q3	04 01	2022   Q2   Q3	Q4 Q1
0	Prepare DDA (E&M works) and ICE certification (Final)	16 days		16 days	0%	Thu 4/3/21	Fri 19/3/21	NA	NA	Mon 8/3/21	Tue 23/3/21	4 days 1 day	399					Q2   Q3	Q4 Q1
1	Submit & endorse by PM and Statutory Authorities/Gov. Dept	61 days	0 days	61 days	0%	Sat 20/3/21	Wed 19/5/21	NA	NA	Wed 24/3/21	Sun 23/5/21	4 days 1 day	400			<b>*</b>			
2	DCS Seawater & Intake Box Culverts (approx 88m) (Section 2)	479 days	304.41 days	174.59 days	0%	Tue 13/8/19	Thu 3/12/20	Tue 13/8/19	NA	Tue 13/8/19	Tue 3/8/21	243 days							
3	Prepare AIP Subm with ICE certification (Draft)	165 days	s 165 days	0 days	100%	Tue 13/8/19	Fri 24/1/20	Tue 13/8/19	Fri 24/1/20	Tue 13/8/19	Fri 24/1/20	0 days 3 days		-					
4	Submit & endorse by PM	85 days	85 days	0 days	100%	Thu 23/1/20	Thu 16/4/20	Thu 23/1/20	Thu 16/4/20	Thu 23/1/20	Thu 16/4/20	0 days 1 day	403						
5	Submit & endorse by Statutory Authorities/Gov. Dept	90 days	90 days	0 days	100%	Fri 24/1/20	Mon 27/4/20	Fri 24/1/20	Mon 27/4/20	Fri 24/1/20	Mon 27/4/20	0 days 1 day	403						
6	Prepare AIP and ICE certification (Final)		0 days	0 days	100%	Thu 23/4/20			Mon 27/4/20		Mon 27/4/20	0 days 1 days		27/4					
7	Prepare DDA and ICE certification	80 days		80 days	0%	Sat 23/5/20	Mon 10/8/20		NA	Thu 21/1/21	Sat 10/4/21	243 days 5 days							
3	-		-				Tue 29/9/20		NA					1					
9	Submit & endorse by PM and Statutory Authorities/Gov. Dept	50 days		50 days	0%	Tue 11/8/20				Sun 11/4/21	Sun 30/5/21	243 days 3 days							
	Prepare DDA for and ICE certification (Final)	15 days		15 days	0%	Wed 30/9/20	Wed 14/10/20		NA	Mon 31/5/21	Mon 14/6/21	243 days 1 day	408						
0	Submit & endorse by PM and Statutory Authorities/Gov. Dept	50 days		50 days	0%	Thu 15/10/20	Thu 3/12/20		NA	Tue 15/6/21	Tue 3/8/21	243 days 2 days	409						
1	Seawater & Intake Box Culverts Diversion	248 days	49.98 days	198.02 days	0%	Wed 1/4/20	Fri 4/12/20	Wed 1/4/20	NA	Wed 1/4/20	Wed 6/10/21	306 days							
2	Prepare AIP Subm (Draft)	32 days	32 days	0 days	100%	Wed 1/4/20	Sat 2/5/20	Wed 1/4/20	Sat 2/5/20	Wed 1/4/20	Sat 2/5/20	0 days 3 days							
3	Submit & endorse by PM and Statutory Authorities/Gov. Dept	51 days	21 days	30 days	41%	Sat 2/5/20	Mon 22/6/20	Sat 2/5/20	NA	Sat 2/5/20	Tue 17/11/20	148 days 3 days	412		h				
4	Prepare AIP and ICE certification (Final)	15 days	0 days	15 days	0%	Tue 23/6/20	Tue 7/7/20	NA	NA	Wed 18/11/20	Wed 2/12/20	148 days 1 days	412,413						
5	Prepare DDA and ICE certification	50 days	0 days	50 days	0%	Tue 23/6/20	Tue 11/8/20	NA	NA	Sun 25/4/21	Sun 13/6/21	306 days 5 days	412SS,413FI	7+5(					
6	Submit & endorse by PM and Statutory Authorities/Gov. Dept	50 days	0 days	50 days	0%	Wed 12/8/20	Wed 30/9/20	NA	NA	Mon 14/6/21	Mon 2/8/21	306 days 3 days	415						
,	Prepare DDA for and ICE certification (Final)	15 days	0 days	15 days	0%	Thu 1/10/20	Thu 15/10/20	NA	NA	Tue 3/8/21	Tue 17/8/21	306 days 1 day	416	$-\parallel \parallel \parallel \parallel$					
	Submit & endorse by PM and Statutory Authorities/Gov. Dept	50 days	0 days	50 days	0%	Fri 16/10/20	Fri 4/12/20	NA	NA	Wed 18/8/21	Wed 6/10/21	306 days 2 days	417	$-\parallel \parallel \parallel \parallel$					
	Rising Main (Sewerage Works)		s 134 days	268 days	0%	Thu 2/1/20	Sat 6/2/21		NA	Thu 2/1/20	Sun 7/3/21	29 days				<b>-</b>			
	Prepare AIP (Draft)		35 days	0 days	100%	Thu 2/1/20	Wed 5/2/20	Thu 2/1/20	Wed 5/2/20		Wed 5/2/20	0 days 3 days	4						
	Submit & endorse by PM		19 days	0 days	100%	Thu 6/2/20	Mon 24/2/20		Mon 24/2/20		Mon 24/2/20	0 days 1 day							
	Submit & endorse by PM and Statutory Authorities/Gov. Dept		56 days	0 days	100%	Thu 0/2/20	Fri 22/5/20	Thu 27/2/20		Thu 27/2/20	Fri 22/5/20	0 days 2 days	420						
	Prepare AIP and ICE certification (Final)		-	1			Mon 14/9/20												
	• , , ,	75 days		75 days	0%	Thu 2/7/20			NA	Fri 31/7/20	Tue 13/10/20	29 days 0 days							
	Prepare DDA and ICE certification (Draft)	30 days	-	30 days	0%	Tue 15/9/20	Wed 14/10/20		NA	Wed 14/10/20	Thu 12/11/20	29 days 4 days							
	Submit & endorse by PM and Statutory Authorities/Gov. Dept	50 days		50 days	0%	Thu 15/10/20			NA	Fri 13/11/20	Fri 1/1/21	29 days 3 days							
	Prepare DDA and ICE certification (Final)	15 days	0 days	15 days	0%	Fri 4/12/20	Fri 18/12/20	NA	NA	Sat 2/1/21	Sat 16/1/21	29 days 0 days	425						
7	Submit & endorse by PM and Statutory Authorities/Gov. Dept	50 days	0 days	50 days	0%	Sat 19/12/20	Sat 6/2/21	NA	NA	Sun 17/1/21	Sun 7/3/21	29 days 3 days	426,423			-			
3	Stormwater, Sewage, Salt Water and Fresh Water Works for Underpass and Depress Road	ed 641 days	151.9 days	489.1 days	0%	Fri 13/9/19	Mon 14/6/21	Fri 13/9/19	NA	Fri 13/9/19	Mon 28/6/21	14 days							
)	Stormwater Drainage AIP for Underpass and Depressed Roads and ICE certificat (Draft)	ion 72 days	72 days	0 days	100%	Mon 2/12/19	Tue 11/2/20	Mon 2/12/19	Tue 11/2/20	Mon 2/12/19	Tue 11/2/20	0 days 1 day							
0	Submit & endorse by PM	51 days	51 days	0 days	30%	Wed 12/2/20	Thu 2/4/20	Wed 12/2/20	Thu 2/4/20	Wed 12/2/20	Thu 2/4/20	0 days 0.5 day	ys 429						
1	Submit & endorse by Statutory Authorities/Gov. Dept	139 days	64 days	75 days	46%	Fri 20/3/20	Wed 5/8/20	Fri 20/3/20	NA	Fri 20/3/20	Fri 30/10/20	86 days	429						
2	Prepare AIP and ICE certification (Final)	150 days	50 days	100 days	33%	Fri 3/4/20	Sun 30/8/20	Fri 3/4/20	NA	Fri 3/4/20	Sat 14/11/20	76 days	431FF+15 da	ıys					
3	Prepare DDA and ICE certification (Draft)	150 days	0 days	150 days	0%	Sat 23/5/20	Mon 19/10/20	) NA	NA	Sat 18/7/20	Mon 14/12/20	56 days 1 day	429,432FF+3	80 d	•				
4	Submit & endorse by PM and Statutory Authorities/Gov. Dept	90 days	0 days	90 days	0%	Tue 20/10/20	Sun 17/1/21	NA	NA	Tue 15/12/20	Sun 14/3/21	56 days 0.5 day	ys 433	$-\parallel \parallel \parallel \parallel$					
5	Prepare DDA and ICE certification (Final)	31 days		31 days	0%	Mon 18/1/21	Wed 17/2/21	NA	NA	Mon 15/3/21		56 days 1 day	434	$-\parallel \parallel \parallel \parallel$					
5	Submit & endorse by PM and Statutory Authorities/Gov. Dept	75 days		75 days	0%	Thu 18/2/21	Mon 3/5/21		NA	Thu 15/4/21		56 days 5 days		$-\parallel \parallel \parallel \parallel$					
7	Fresh and Salt Water Works AIP for Underpass, Depressed Road and ICE		51 days	0 days	100%	Tue 8/10/19	Wed 27/11/19		Wed	Tue 8/10/19		0 days 1 day		_					
	certification (Draft)  Submit & endorse by PM				100%	Thu 28/11/19		Thu 28/11/19	27/11/19				vs 437	[					
9			26 days	0 days							Mon 23/12/19		ys 437						
	Submit & endorse by Statutory Authorities/Gov. Dept		14 days	0 days	100%	Wed 8/4/20	Fri 24/4/20			Wed 8/4/20	Fri 24/4/20		437						
	Prepare AIP for Underpass, Depressed Road and ICE certification (Final)		22 days	0 days	100%	Sat 25/4/20		Sat 25/4/20	Sat 16/5/20		Sat 16/5/20	0 days 0 days							
	Prepare DDA for Underpass, Depressed Road and ICE certification (Draft)	90 days	0 days	90 days	0%	Sun 17/5/20	Fri 14/8/20	NA	NA	Fri 2/10/20		138 days 1 day			H_				
2	Submit & endorse by PM and Statutory Authorities/Gov. Dept	75 days	0 days	75 days	0%	Sat 15/8/20	Wed 28/10/20	NA NA	NA	Thu 31/12/20	Mon 15/3/21	138 days 0.5 day	ys 441						
3	Prepare DDA for Underpass, Depressed Road and ICE certification (Final)	30 days	0 days	30 days	0%	Thu 29/10/20	Fri 27/11/20	NA	NA	Tue 16/3/21	Wed 14/4/21	138 days 0 days	442						
4	Submit & endorse by PM and Statutory Authorities/Gov. Dept	75 days	0 days	75 days	0%	Sat 28/11/20	Wed 10/2/21	NA	NA	Thu 15/4/21	Mon 28/6/21	138 days 0 days	443						
- D - 1	1 Duo suith Duo suo Task	Summary			Inactive Mi	lestone $\diamond$		Duration-on	ıly		Start-only	Е		External Milesto	ne 🔷		Critical Split		
e: Rev.1 of 22-N	1 Prog with Progress		nmary		Inactive Su				mmary Rollup		Finish-only	3		Deadline	•		Progress		
	Milestone •	Inactive Ta	sk		Manual Tas	sk 📗		Manual Sur	nmary		External Tasl	CS CS		Critical			Manual Progress		

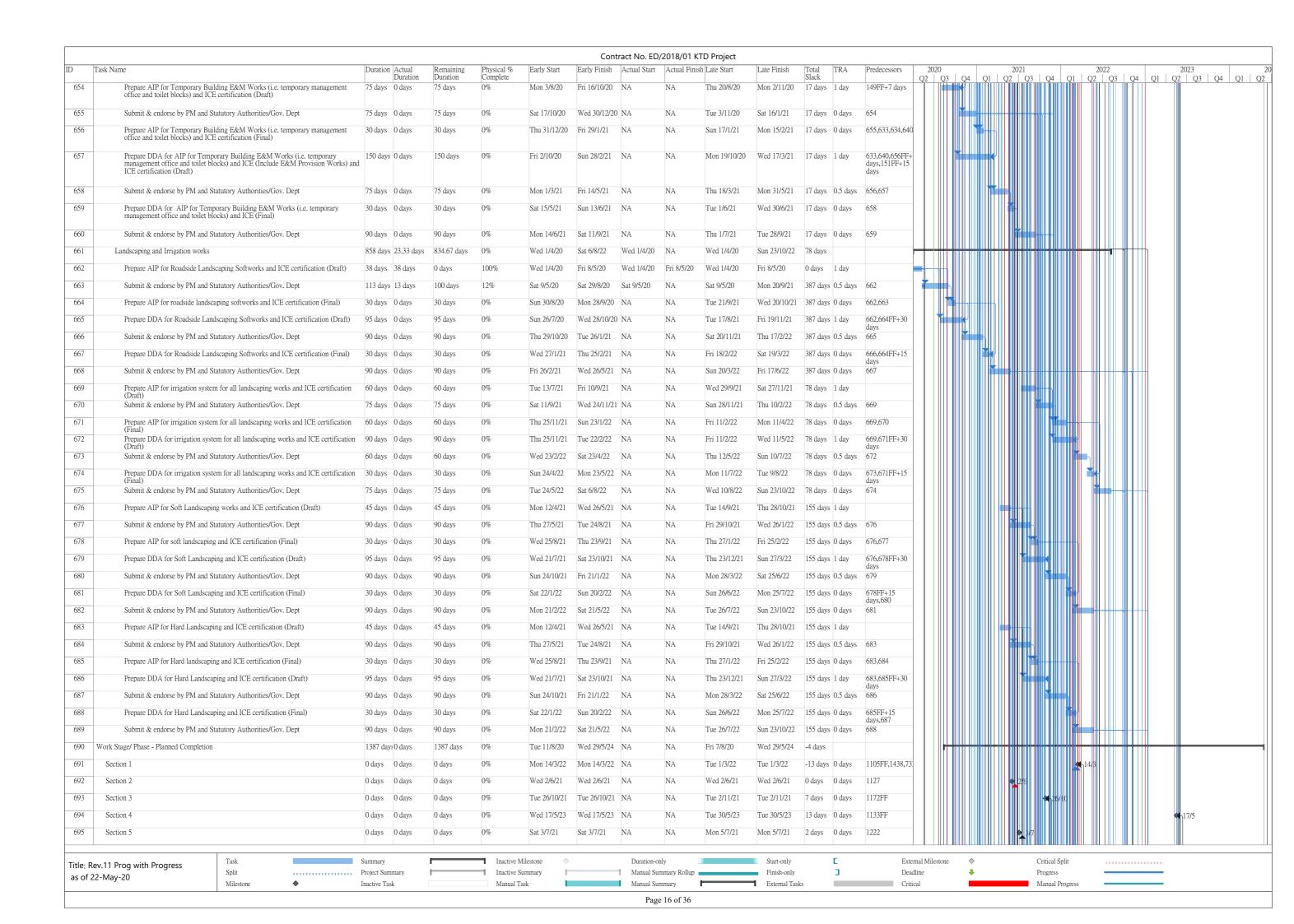




							Cont	tract No. ED/	/2018/01 KT	D Project									
Task Na	ame	Duration	n Actual Duration	Remaining Duration	Physical % Complete	Early Start	Early Finish	Actual Start	Actual Finish	Late Start	Late Finish	Total TRA	A Predecessors		20 Q3   Q4	O1   O2   O	03   04   0	2022 Q1   Q2	
35	Prepare AIP for Salt Water Pumping Station E&M works and ICE certification	77 days	0 days	77 days	0%	Mon 17/8/20	Sun 1/11/20	NA	NA	Sun 13/9/20	Sat 28/11/20	27 days 2 da	nys 534	Q2	Q3 Q4	Q1 Q2 Q	23   Q4   Q	21   Q2	Q3 Q4
36	(Final) Prepare DDA for Salt Water Pumping Station E&M works and ICE certification	120 days	s 0 days	120 days	0%	Tue 4/8/20	Tue 1/12/20	NA	NA	Mon 31/8/20	Mon 28/12/20	27 days 1 da		F+3(		F III			
37	(Draft) Submit to WSD for Plumbing and Irrigation Works for approval	0 days	0 davs	0 days	0%	Tue 1/12/20	Tue 1/12/20	NA	NA	Tue 29/12/20	Tue 29/12/20	27 days 1 da	days,516 v 536			1/12			
38	Submit & endorse by PM and Statutory Authorities/Gov. Dept	91 days		91 days	0%	Wed 2/12/20	Tue 2/3/21		NA	Tue 29/12/20	Mon 29/3/21	27 days 1 da							
	Prepare DDA for Salt Water Pumping Station and ICE certification (Final)				0%	Wed 3/3/21	Fri 2/4/21	NA	NA	Tue 30/3/21	Thu 29/4/21								
39		31 days		31 days								27 days 1 da	days,538						
.0	Submit & endorse by PM and Statutory Authorities/Gov. Dept	91 days		91 days	0%	Sat 3/4/21	Fri 2/7/21	NA	NA	Fri 30/4/21	Thu 29/7/21	27 days 1 da	ry 539						
1	AIP for Remaining Works of Salt Water & Sewerage Pumping and ICE certification (Draft)	on 41 days	41 days	0 days	0%	Mon 17/2/20	Sat 28/3/20	Mon 17/2/20	Sat 28/3/20	Mon 17/2/20	Sat 28/3/20	0 days 1 da	ay 4						
-2	Submit & endorse by PM	18 days	18 days	0 days	100%	Mon 30/3/20	Thu 16/4/20	Mon 30/3/20	Thu 16/4/20	Mon 30/3/20	Thu 16/4/20	0 days		-	<b>-</b>				
3	Submit & endorse by Statutory Authorities/Gov. Dept	90 days	0 days	90 days	0%	Mon 3/8/20	Sat 31/10/20	NA	NA	Sun 14/3/21	Fri 11/6/21	223 days 0.5	days 541,542						
4	AIP for Remaining Works of Salt Water Pumping & Sewage and ICE certification (Final)	90 days	0 days	90 days	0%	Sun 1/11/20	Fri 29/1/21	NA	NA	Sat 12/6/21	Thu 9/9/21	223 days 3 da	nys 543						
15	DDA for Remaining Works of Salt Water & Sewage Pumping and ICE certification	1 90 days	0 days	90 days	0%	Sun 6/12/20	Fri 5/3/21	NA	NA	Sat 17/7/21	Thu 14/10/21	223 days 1 da		35					
-6	(Draft) Submit & endorse by PM and Statutory Authorities/Gov. Dept	93 days	0 days	93 days	0%	Sat 6/3/21	Sun 6/6/21	NA	NA	Fri 15/10/21	Sat 15/1/22	223 days 3 da	days nys 545						
17	DDA for Remaining Works of Salt Water & Sewage Pumping and ICE certification	n 35 davs	0 davs	35 days	0%	Mon 7/6/21	Sun 11/7/21	NA	NA	Sun 16/1/22	Sat 19/2/22	223 days 3 da	ays 546,544FF+	12		1			
48	(Final) Submit & endorse by PM and Statutory Authorities/Gov. Dept		0 days	75 days	0%	Mon 12/7/21	Fri 24/9/21		NA	Sun 20/2/22	Thu 5/5/22	223 days 2 da	days	_		<u> </u>			
49																<del>   </del>			
	AIP for Architectural works of Salt Water & Sewage Pumping and ICE certification (Draft)			45 days	0%	Mon 5/4/21	Wed 19/5/21		NA	Mon 3/5/21	Wed 16/6/21	28 days 1 da							
50	Submit & endorse by PM and Statutory Authorities/Gov. Dept		0 days	60 days	0%	Thu 20/5/21	Sun 18/7/21		NA	Thu 17/6/21	Sun 15/8/21	28 days 0.5	-						
1	AIP for Architectural works of Salt Water Pumping & Sewage and ICE certification (Final)	on 62 days	0 days	62 days	0%	Mon 19/7/21	Sat 18/9/21	NA	NA	Mon 16/8/21	Sat 16/10/21	28 days 2 da	sys 549,550			Î			
52	DDA for Architectural works of Salt Water & Sewage Pumping and ICE certification (Draft)	60 days	0 days	60 days	0%	Fri 20/8/21	Mon 18/10/21	NA	NA	Fri 17/9/21	Mon 15/11/21	28 days 1 da	549,551FF+	30					
3	Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days	0 days	60 days	0%	Tue 19/10/21	Fri 17/12/21	NA	NA	Tue 16/11/21	Fri 14/1/22	28 days 0.5	days 552						
4	DDA for Architectural works of Salt Water & Sewage Pumping and ICE	36 days	0 days	36 days	0%	Sat 18/12/21	Sat 22/1/22	NA	NA	Sat 15/1/22	Sat 19/2/22	28 days 2 da						4	
5	certification (Final)  Submit & endorse by PM and Statutory Authorities/Gov. Dept	62 days	0 days	62 days	0%	Sun 23/1/22	Fri 25/3/22	NA	NA	Sun 20/2/22	Fri 22/4/22	28 days 2 da	days,553 nys 554						
	AIP for Landscaping works of Salt Water & Sewage Pumping and ICE certification			45 days	0%	Mon 5/4/21	Wed 19/5/21	NΑ	NA	Sun 2/5/21	Tue 15/6/21	27 days 1 da							
	(Draft) Submit & endorse by PM and Statutory Authorities/Gov. Dept		0 days	61 days	0%	Thu 20/5/21	Mon 19/7/21		NA	Wed 16/6/21	Sun 15/8/21	27 days 0.5							
	AIP for Landscaping works of Salt Water Pumping & Sewage and ICE certification (Final)	1 62 days	0 days	62 days	0%	Tue 20/7/21	Sun 19/9/21		NA	Mon 16/8/21	Sat 16/10/21	27 days 2 da							
	DDA for Landscaping works of Salt Water & Sewage Pumping and ICE certification (Draft)	62 days	0 days	62 days	0%	Thu 19/8/21	Tue 19/10/21	NA	NA	Wed 15/9/21	Mon 15/11/21	27 days 2 da	tys 556,558FF+: days	30					
	Submit & endorse by PM and Statutory Authorities/Gov. Dept	61 days	0 days	61 days	0%	Wed 20/10/21	Sun 19/12/21	NA	NA	Tue 16/11/21	Sat 15/1/22	27 days 0.5	days 559						
	DDA for Landscaping works of Salt Water & Sewage Pumping and ICE certification (Final)	35 days	0 days	35 days	0%	Mon 20/12/21	Sun 23/1/22	NA	NA	Sun 16/1/22	Sat 19/2/22	27 days 2 da	sys 558FF+12 days,560						
2	Submit & endorse by PM and Statutory Authorities/Gov. Dept	61 days	0 days	61 days	0%	Mon 24/1/22	Fri 25/3/22	NA	NA	Sun 20/2/22	Thu 21/4/22	27 days 2 da							
	AIP for Seawater Intake and Box Culvert Structures for Pumping Station (approx. 160m) (Section 6) Submission (Draft)	58 days	58 days	0 days	100%	Tue 10/12/19	Wed 5/2/20	Tue 10/12/19	Wed 5/2/20	Tue 10/12/19	Wed 5/2/20	0 days 1 da	ay						
4	Submit & endorse by PM	25 days	25 days	0 days	33%	Wed 5/2/20	Thu 5/3/20	Wed 5/2/20	Thu 5/3/20	Wed 5/2/20	Thu 5/3/20	0 days 0.5	days 563		<u> </u>				
55	Submit & endorse by Statutory Authorities/Gov. Dept	50 days	0 days	50 days	0%	Sat 23/5/20	Sat 11/7/20	NA	NA	Sun 28/3/21	Sun 16/5/21	309 days 0.5	days 563						
66	AIP for Seawater Intake and Box Culvert Structure (Final)	21 days	0 days	21 days	0%	Sun 12/7/20	Sat 1/8/20	NA	NA	Mon 17/5/21	Sun 6/6/21	309 days 0.5	days 563,565,564						
57	DDA for Seawater Intake and Box Culvert Structure (Draft)	15 days	0 days	15 days	0%	Sat 25/7/20		NA	NA	Sun 30/5/21	Sun 13/6/21	309 days 1 da							
58	Submit & endorse by PM and Statutory Authorities/Gov. Dept	50 days		50 days	0%	Sun 9/8/20	Sun 27/9/20		NA	Mon 14/6/21	Mon 2/8/21	309 days 0.5							
69														EE.					
	DDA for Seawater Intake and Box Culvert Structure (Final)		0 days	15 days	0%	Mon 28/9/20	Mon 12/10/20		NA	Tue 3/8/21	Tue 17/8/21	309 days 1 da		1.L+					
0	Submit & endorse by PM and Statutory Authorities/Gov. Dept		0 days	50 days	0%	Tue 13/10/20	Tue 1/12/20		NA	Wed 18/8/21	Wed 6/10/21	309 days 0.5	days 569						
1	Elevated Landscape Deck Staircase & Associated Work	714 days	s 268.49 days	445.51 days	0%	Thu 30/5/19	Wed 12/5/21	Thu 30/5/19	NA	Thu 30/5/19	Mon 5/7/21	54 days				1			
2	Elevated Landscape Deck Superstructure AIP and ICE certification (Draft)	96 days	96 days	0 days	100%	Thu 30/5/19	Mon 2/9/19	Thu 30/5/19	Mon 2/9/19	Thu 30/5/19	Mon 2/9/19	0 days 3 da	ays 4						
3	Submit & endorse by PM	15 days	15 days	0 days	100%	Tue 3/9/19	Tue 17/9/19	Tue 3/9/19	Tue 17/9/19	Tue 3/9/19	Tue 17/9/19	0 days 1 da	rys 572						
4	Submit & endorse by Statutory Authorities/Gov. Dept	162 days	s 162 days	0 days	0%	Tue 24/9/19	Tue 3/3/20	Tue 24/9/19	Tue 3/3/20	Tue 24/9/19	Tue 3/3/20	0 days 0.5	days 573						
;	Prepare AIP and ICE certification (Final)	255 days	s 155 days	100 days	61%	Wed 20/11/19	Fri 31/7/20	Wed 20/11/19	) NA	Wed 20/11/19	Thu 26/11/20	118 days 0.5	days 44FF+12 day	ys -	<b>14</b> -				
5	Prepare DDA and ICE certification (Draft)	75 days	0 days	75 days	0%	Fri 12/6/20	Sun 30/8/20	NA	NA	Thu 8/10/20	Sat 26/12/20	118 days 1 da	sy 574FF+30 d	ays,					
7	Submit & endorse by PM and Statutory Authorities/Gov. Dept		0 days	50 days	0%	Mon 31/8/20	Mon 19/10/20		NA	Sun 27/12/20	Sun 14/2/21	118 days 0.5		$-\parallel\parallel\uparrow$					
78	Prepare DDA for and ICE certification (Final)				0%	Tue 20/10/20			NA	Mon 15/2/21	Mon 8/3/21								
10	repare DDA for and tele certification (Final)	ZZ uays	0 days	22 days	070	1 uc 20/10/20	1 uc 10/11/20	INA	IVA	WIOH 1312121	1011 0/3/21	118 days 1 da	iy 5//						
	Task	Summary		_	Inactive N	filestone 🔷		Duration-on	ılv		Start-only	Г		External Mile	stone 《	<b>&gt;</b>	Critical Split		
le: Rev.11 I of 22-May	Prog with Progress Split	Project Sur	mmary	-	Inactive S				nmary Rollup		Finish-only	3		Deadline Deadline	4	}	Progress	_	
UI ZZ-IVIď	/-20 Milestone ♦	Inactive Ta	1.		Manual T	ools		Manual Sur			External Tasi			Critical	_		Manual Progr		

							Cont	tract No. ED/	/2018/01 KT	TD Project										
Task	Name	Duration	Actual Duration	Remaining Duration	Physical % Complete	Early Start	Early Finish	Actual Start	Actual Finish	Late Start	Late Finish	Total TRA Slack	Predecessors	2020	O4 O1 O2 O	3   Q4   Q1	200	22	01   0	2023
579	Submit & endorse by PM and Statutory Authorities/Gov. Dept	50 days		50 days	0%	Wed 11/11/20	Wed 30/12/20	) NA	NA	Tue 9/3/21	Tue 27/4/21	118 days 1 day	578		Q4 Q1 Q2 Q		1   Q2	Q3   Q4	Q1 Q	.   Q3   1
580	Elevated Landscape Deck - Lift (LT1&LT2)& Staircase include E&M Progvision: AIP and ICE Certification (Draft)	50 days	50 days	0 days	100%	Mon 7/10/19	Mon 25/11/19	Mon 7/10/19	Mon 25/11/19	Mon 7/10/19	Mon 25/11/19	0 days 3 days	44FF+12 days							
581	Submit & endorse by PM	21 days	21 days	0 days	100%	Tue 26/11/19	Mon 16/12/19	Tue 26/11/19		Tue 26/11/19	Mon 16/12/19	0 days 1 days	580	$\parallel \parallel \parallel \parallel$						
582	Submit & endorse by Statutory Authorities/Gov. Dept	120 days	85 days	35 days	71%	Fri 28/2/20	Fri 26/6/20	Fri 28/2/20	NA	Fri 28/2/20	Thu 13/8/20	48 days 1 days	580							
583	Prepare AIP and ICE certification (Final)	60 days	0 days	60 days	0%	Sat 27/6/20	Tue 25/8/20	NA	NA	Fri 14/8/20	Mon 12/10/20	48 days 0 days	580,581,582,44F							
584	Prepare DDA and ICE certification (Draft)	60 days	0 days	60 days	0%	Tue 11/8/20	Wed 14/10/20	) NA	NA	Mon 28/9/20	Tue 1/12/20	48 days 1 day	580,583FF+50 d							
585	Submit & endorse by PM and Statutory Authorities/Gov. Dept	90 days	0 days	90 days	0%	Thu 15/10/20	Tue 12/1/21	NA	NA	Wed 2/12/20	Mon 1/3/21	48 days 0.5 da	ys 584							
586	Prepare DDA for and ICE certification (Final)	30 days	0 days	30 days	0%	Wed 13/1/21	Thu 11/2/21	NA	NA	Tue 2/3/21	Wed 31/3/21	48 days 0.5 da	ys 585,583FF+12 d							
587	Submit & endorse by PM and Statutory Authorities/Gov. Dept	90 days	0 days	90 days	0%	Fri 12/2/21	Wed 12/5/21	NA	NA	Thu 1/4/21	Tue 29/6/21	48 days 2 days	586		<b>*</b>					
588	Elevated Landscape Deck - Open Space AIP Subm (Draft)	50 days	50 days	0 days	100%	Mon 10/2/20	Mon 30/3/20	Mon 10/2/20	Mon 30/3/20	Mon 10/2/20	Mon 30/3/20	0 days 3 days								
589	Submit & endorse by PM	21 days		0 days	100%	Mon 30/3/20	Mon 20/4/20	Mon 30/3/20	Mon 20/4/20	Mon 30/3/20	Mon 20/4/20	0 days 0.5 da	ys 588							
590	Submit & endorse by Statutory Authorities/Gov. Dept	50 days		50 days	0%	Mon 6/7/20	Mon 24/8/20		NA	Mon 28/9/20		84 days 1 days								
591	Prepare AIP and ICE certification (Final)	30 days		30 days	0%	Tue 25/8/20	Wed 23/9/20		NA	Tue 17/11/20		84 days 2 days								
592	Prepare DDA and ICE certification (Draft)	75 days		75 days	0%	Thu 24/9/20	Sat 12/12/20		NA	Thu 17/12/20	Sat 6/3/21	84 days 1 day	590SS,591							
593					0%	Sun 13/12/20				Sun 7/3/21	Sat 6/3/21 Sun 25/4/21	84 days 0.5 da								
	Submit & endorse by PM and Statutory Authorities/Gov. Dept	50 days		50 days			Sun 31/1/21		NA											
594	Prepare DDA for and ICE certification (Final)	21 days		21 days	0%	Mon 1/2/21	Sun 21/2/21	NA	NA	Mon 26/4/21	Sun 16/5/21	84 days 0 days								
595	Submit & endorse by PM and Statutory Authorities/Gov. Dept	50 days		50 days	0%	Mon 22/2/21	Mon 12/4/21		NA 2011/20	Mon 17/5/21	Mon 5/7/21	84 days 0 days								
596	EVA for Open Space AIP Subm (Draft)	71 days		0 days	100%	Mon 10/2/20		Mon 10/2/20		Mon 10/2/20	Mon 20/4/20	0 days 3 days								
597	Submit & endorse by PM	2 days	2 days	0 days	100%	Tue 21/4/20	Mon 27/4/20	Tue 21/4/20	Mon 27/4/20	Tue 21/4/20	Mon 27/4/20	0 days 1 day	596							
598	Submit & endorse by Statutory Authorities/Gov. Dept	50 days	0 days	50 days	0%	Mon 6/7/20	Mon 24/8/20	NA	NA	Sun 4/10/20	Sun 22/11/20	90 days 1 days	596							
599	Prepare AIP and ICE certification (Final)	30 days	0 days	30 days	0%	Tue 25/8/20	Wed 23/9/20	NA	NA	Mon 23/11/20	Tue 22/12/20	90 days 2 days	596,598,44FF+1							
600	Prepare DDA and ICE certification (Draft)	60 days	0 days	60 days	0%	Thu 24/9/20	Fri 27/11/20	NA	NA	Wed 23/12/20	Thu 25/2/21	90 days 1 day	598SS,599							
601	Submit & endorse by PM and Statutory Authorities/Gov. Dept	50 days	0 days	50 days	0%	Sat 28/11/20	Sat 16/1/21	NA	NA	Fri 26/2/21	Fri 16/4/21	90 days 0.5 da	ys 600							
602	Prepare DDA for and ICE certification (Final)	30 days	0 days	30 days	0%	Sun 17/1/21	Mon 15/2/21	NA	NA	Sat 17/4/21	Sun 16/5/21	90 days 0 days	599FF+6 days,60							
603	Submit & endorse by PM and Statutory Authorities/Gov. Dept	50 days	0 days	50 days	0%	Tue 16/2/21	Tue 6/4/21	NA	NA	Mon 17/5/21	Mon 5/7/21	90 days 0 days	602							
604	Waterfront Promenade and At-grade Open Space	533 days	5.98 days	527.02 days	0%	Wed 1/4/20	Wed 15/9/21	Wed 1/4/20	NA	Wed 1/4/20	Tue 28/9/21	13 days	-			<del>-</del> hh				
605	Prepare AIP for Observation Deck with Lift (LTS) and Staircase and ICE (Include E&M Provision Works) certification (Draft)	24 days	24 days	0 days	100%	Wed 1/4/20	Fri 24/4/20	Wed 1/4/20	Fri 24/4/20	Wed 1/4/20	Fri 24/4/20	0 days 1 day	-							
606	Submit & endorse by PM and Statutory Authorities/Gov. Dept	14 days	14 days	0 days	0%	Fri 24/4/20	Fri 8/5/20	Fri 24/4/20	Fri 8/5/20	Fri 24/4/20	Fri 8/5/20	0 days 1 day	605							
607	Prepare AIP for Observation Deck with Lift (LT5) and Staircase and ICE (Include E&M Provision Works) certification (Final)	31 days	0 days	31 days	0%	Wed 16/9/20	Fri 16/10/20	NA	NA	Thu 22/10/20	Sat 21/11/20	36 days 1 day	605,606,647FF,6							
608	Prepare DDA for Observation Deck with Lift and Staircase and ICE (Include E&N Provision Works) certification (Draft)	M 100 days	0 days	100 days	0%	Sat 17/10/20	Sun 24/1/21	NA	NA	Sun 22/11/20	Mon 1/3/21	36 days 1 day	605,647,654,607							
609	Submit & endorse by PM and Statutory Authorities/Gov. Dept	90 days	0 days	90 days	0%	Mon 25/1/21	Sat 24/4/21	NA	NA	Tue 2/3/21	Sun 30/5/21	36 days 0.5 da	ys 608,607							
610	Prepare DDA for Observation Deck with Lift and Staircase and ICE (Include E&N Provision Works) certification (Final)	M 31 days	0 days	31 days	0%	Sun 25/4/21	Tue 25/5/21	NA	NA	Mon 31/5/21	Wed 30/6/21	36 days 1 day	609							
611	Submit & endorse by PM and Statutory Authorities/Gov. Dept	90 days	0 days	90 days	0%	Wed 26/5/21	Mon 23/8/21	NA	NA	Thu 1/7/21	Tue 28/9/21	36 days 2 days	610							
612	Prepare AIP for Remaining Works at Waterfront Promenade and ICE (Include E&M Provision Works) certification (Draft)	51 days	0 days	51 days	0%	Mon 14/9/20	Tue 3/11/20	NA	NA	Sun 27/9/20	Mon 16/11/20	13 days 2 days								
613	Submit & endorse by PM and Statutory Authorities/Gov. Dept	75 days	0 days	75 days	0%	Wed 4/11/20	Sun 17/1/21	NA	NA	Tue 17/11/20	Sat 30/1/21	13 days 0.5 da	ys 612							
614	Prepare AIP for Remaining Works at Waterfront Promenade and ICE (Include E&M Provision Works) certification (Final)	60 days	0 days	60 days	0%	Mon 18/1/21	Thu 18/3/21	NA	NA	Sun 31/1/21	Wed 31/3/21	13 days 2 days	612,613							
615	Prepare DDA for Remaining Works at Waterfront Promenade and ICE (Include E&M Provision Works) certification (Draft)	75 days	0 days	75 days	0%	Tue 2/2/21	Sat 17/4/21	NA	NA	Mon 15/2/21	Fri 30/4/21	13 days 1 day	612,614FF+30 days							
616	Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days	0 days	60 days	0%	Sun 18/4/21	Wed 16/6/21	NA	NA	Sat 1/5/21	Tue 29/6/21	13 days 1 day	615							
617	Prepare DDA for Remaining Works at Waterfront Promenade and ICE (Include E&M Provision Works) certification (Final)	31 days	0 days	31 days	0%	Thu 17/6/21	Sat 17/7/21	NA	NA	Wed 30/6/21	Fri 30/7/21	13 days 1 day	616,614FF+15 days		Ĭ.					
618	Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days	0 days	60 days	0%	Sun 18/7/21	Wed 15/9/21	NA	NA	Sat 31/7/21	Tue 28/9/21	13 days 1 day	617							
619	AIP for Cladding Design of Landscape Deck, Lifts and associated Works (Draft)	31 days	0 days	31 days	0%	Mon 20/7/20	Wed 19/8/20	NA	NA	Fri 21/8/20	Sun 20/9/20	32 days 1 day								
	Task	Summary			Inactive Mi	ilestone 🔷		Duration-or	nlv		Start-only	г	Fytema	l Milestone	<b>♦</b>	Critical Split				
Title: Rev.11 as of 22-M	Prog with Progress	Project Sum	ımary		Inactive Su				mmary Rollup		Finish-only	3	Deadlin		•	Progress				
as UI 22-1VI	ay-20 Milestone ◆	Inactive Tas	sk		Manual Tas	sk		Manual Sur	mmary I		External Tas	ks	Critical			Manual Progre	ess			

							Cont	tract No. ED	/2018/01 K	TD Project										
Task	Name	Duration	1 Actual	Remaining	Physical %	Early Start	Early Finish	Actual Start	Actual Finis	h Late Start	Late Finish	Total TRA Slack	Predecessors		n   c :	01   -2	2021		2022	02
20	Submit & endorse by PM and Statutory Authorities/Gov. Dept	63 days	Duration 0 days	Duration 63 days	Complete 0%	Thu 20/8/20	Wed 21/10/20	) NA	NA	Mon 21/9/20	Sun 22/11/20	32 days 3 day	rs 619	Q2   Q	23 Q4	Q1   Q2	Q3 Q4	Q1	Q2   (	Q3 Q
21	AIP for Cladding Design of Landscape Deck, Lifts and associated Works (Final)	52 days	0 days	52 days	0%	Thu 22/10/20	Sat 12/12/20	NA	NA	Mon 23/11/20	Wed 13/1/21	32 days 2 day	rs 619,620							
22	DDA for Cladding Design of Landscape Deck, Lifts and associated Works (Draft)	61 days	-	61 days	0%	Thu 12/11/20	Mon 11/1/21	NA	NA	Mon 14/12/20	Fri 12/2/21	32 days 1 day		0		4				
23	Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days	_	60 days	0%	Tue 12/1/21	Fri 12/3/21		NA	Sat 13/2/21	Tue 13/4/21	32 days 1 day	days			1				
-	DDA for Cladding Design of Landscape Deck, Lifts and associated Works (Final)	21 days	-	21 days	0%	Sat 13/3/21		NA	NA	Wed 14/4/21	Tue 4/5/21	32 days 1 day		23						
5	Submit & endorse by PM and Statutory Authorities/Gov. Dept	62 days	0 days	62 days	0%	Sat 3/4/21	Thu 3/6/21	NA	NA	Wed 5/5/21	Mon 5/7/21	32 days 2 day	rs 624							
5	AIP for Balustrade and Railing of Promenade, Open Space and Assocated Works (Draft)	30 days	0 days	30 days	0%	Sat 1/8/20	Sun 30/8/20	NA	NA	Tue 29/9/20	Wed 28/10/20	59 days 1 day	1							
7	Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days	0 days	60 days	0%	Mon 31/8/20	Thu 29/10/20	NA	NA	Thu 29/10/20	Sun 27/12/20	59 days 1 day	626							
3	AIP for Balustrade and Railing of Promenade, Open Space and Assocated Works (Final)	25 days	0 days	25 days	0%	Fri 30/10/20	Mon 23/11/20	NA NA	NA	Mon 28/12/20	Thu 21/1/21	59 days 0.5 d	ays 626,627							
	DDA for Balustrade and Railing of Promenade, Open Space and Assocated Works	50 days	0 days	50 days	0%	Wed 4/11/20	Wed 23/12/20	NA	NA	Sat 2/1/21	Sat 20/2/21	59 days 1 day	626,628FF+3	0						
	(Draft) Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days	0 days	60 days	0%	Thu 24/12/20	Sun 21/2/21	NA	NA	Sun 21/2/21	Wed 21/4/21	59 days 0 day	18 629			<b>*</b>				
	DDA for Balustrade and Railing of Promenade, Open Space and Assocated Works	15 days	0 days	15 days	0%	Mon 22/2/21	Mon 8/3/21	NA	NA	Thu 22/4/21	Thu 6/5/21	59 days 1 day	628,629,630			<u> </u>				
!	(Final) Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days	0 days	60 days	0%	Tue 9/3/21	Fri 7/5/21	NA	NA	Fri 7/5/21	Mon 5/7/21	59 days 0 day	rs 631			<del>     </del>				
3	Prepare AIP for Permanent Building Works (i.e. Ampitheater, Observation Tower,			60 days	0%	Wed 29/7/20	Sat 26/9/20		NA	Thu 20/8/20	Sun 18/10/20	22 days 1 day							,	
	Toilet Block, Light Refreshment Kiosk, Refuse Collection Block, Back of House Building Blocks) and ICE certification (Draft)	oo uays	o uays	oo uays	0 10	11 CL 271 1/2U	Jat 2017120	1111	11/1	1114 ZOFOFZU	Juli 10/10/20	22 uays   1 uay	1+711+/ uay							
	Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days	0 days	60 days	0%	Sun 27/9/20	Wed 25/11/20	NA NA	NA	Tue 3/11/20	Fri 1/1/21	37 days 0.5 d	ays 633	$-\parallel \parallel \parallel \parallel$					,	
	Prepare AIP for Permanent Building Works (i.e.Ampitheater, Observation Tower, Toilet Block, Light Refreshment Kiosk, Refuse Collection Block, Back of House Building Blocks) and ICE certification (Final)	30 days	0 days	30 days	0%	Thu 26/11/20	Fri 25/12/20	NA	NA	Sat 2/1/21	Sun 31/1/21	37 days 0 day	vs 633,634							
	Prepare DDA for Permanent Building Works (i.e. Ampitheater, Observation Tower Toilet Block, Light Refreshment Kiosk, Refuse Collection Block, Back of House Building Blocks) and ICE certification (Draft)	, 100 days	s 0 days	100 days	0%	Fri 2/10/20	Sat 9/1/21	NA	NA	Sun 8/11/20	Mon 15/2/21	37 days 1 day	633,635FF+1 days,151FF+ days							
+	Submit & endorse by PM and Statutory Authorities/Gov. Dept	75 days	0 days	75 days	0%	Sun 10/1/21	Thu 25/3/21	NA	NA	Tue 16/2/21	Sat 1/5/21	37 days 0.5 d	ays 635,636	$-\parallel \parallel \parallel \parallel$					,	
	Prepare DDA for Permanent Building Works (i.e. Ampitheater, Observation Tower Toilet Block, Light Refreshment Kiosk, Refuse Collection Block, Back of House			30 days	0%	Fri 26/3/21	Sat 24/4/21		NA	Sun 2/5/21	Mon 31/5/21	37 days 0.3 d								
	Building Blocks) nd ICE certification (Final)																			
	Submit & endorse by PM and Statutory Authorities/Gov. Dept	75 days	0 days	75 days	0%	Sun 25/4/21	Thu 8/7/21	NA	NA	Tue 1/6/21	Sat 14/8/21	37 days 0.5 d	ays 635,636,638							
	Prepare AIP for Permanent Building E&M Works (i.e. Ampitheater, Observation Tower, Toilet Block, Light Refreshment Kiosk, Refuse Collection Block, Back of House Building Blocks) and ICE certification (Draft)	75 days	0 days	75 days	0%	Tue 14/7/20	Sat 26/9/20	NA	NA	Wed 5/8/20	Sun 18/10/20	22 days 1 day	149FF+7 day	S						
	Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days	0 days	60 days	0%	Sun 27/9/20	Wed 25/11/20	) NA	NA	Mon 19/10/20	Thu 17/12/20	22 days 0.5 d	ays 640							
	Prepare AIP for Permanent Building E&M Works (i.e. Observation Tower, Toilet		0 days	30 days	0%	Thu 26/11/20	Fri 25/12/20	NA	NA	Fri 18/12/20	Sat 16/1/21	22 days 0 day	vs 640,641		+					
	Block, Light Refreshment Kiosk, Refuse Collection Block, Back of House Building Blocks) and ICE certification (Final)																			
3	Prepare DDA for Permanent Building E&M Works (i.e. Ampitheater, Observation Tower, Toilet Block, Light Refreshment Kiosk, Refuse Collection Block, Back of House Building Blocks) and ICE (Include E&M Provision Works) certification (Draft)	120 days	s 0 days	120 days	0%	Sun 27/9/20	Sun 24/1/21	NA	NA	Mon 19/10/20	Mon 15/2/21	22 days 1 day	640,642FF+3 days,151FF+ days							
4	Submit & endorse by PM and Statutory Authorities/Gov. Dept	60 days	0 days	60 days	0%	Mon 25/1/21	Thu 25/3/21	NA	NA	Tue 16/2/21	Fri 16/4/21	22 days 0.5 d	ays 642,643							
5	Prepare DDA for Permanent Building E&M Works (i.e. Ampitheater, Observation	30 days	0 days	30 days	0%	Fri 26/3/21	Sat 24/4/21	NA	NA	Sat 17/4/21	Sun 16/5/21	22 days 0 day	rs 644	$-\parallel \parallel \parallel \parallel$					.	
	Tower, Toilet Block, Light Refreshment Kiosk, Refuse Collection Block, Back of House Building Blocks) nd ICE certification (Final)																			
		00.1	0.1	00.1	001	0 254401	E : 02/7/01	NIA	NIA	M 17/5/01	0 . 1.4/0/01	22.1 0.5.1	(42.642.645							
	Submit & endorse by PM and Statutory Authorities/Gov. Dept		0 days	90 days	0%	Sun 25/4/21	Fri 23/7/21		NA	Mon 17/5/21	Sat 14/8/21		ays 642,643,645						,	
	Prepare AIP for Temporary Building Works (i.e. temporary management office and toilet blocks) and ICE certification (Draft)	/5 days	U days	75 days	0%	Mon 3/8/20	Fri 16/10/20	NA	NA	Thu 20/8/20	Mon 2/11/20	17 days 1 day	149FF+7 day	S						
В	Submit & endorse by PM and Statutory Authorities/Gov. Dept	75 days	0 days	75 days	0%	Sat 17/10/20	Wed 30/12/20	NA NA	NA	Tue 3/11/20	Sat 16/1/21	17 days 0 day	rs 647						,	
)	Prepare AIP for Temporary Building Works (i.e. temporary management office and toilet blocks) and ICE certification (Final)	30 days	0 days	30 days	0%	Thu 31/12/20	Fri 29/1/21	NA	NA	Sun 17/1/21	Mon 15/2/21	17 days 0 day	633,634,648,0	640						
	Prepare DDA for AIP for Temporary Building Works (i.e. temporary management office and toilet blocks) and ICE (Include E&M Provision Works) and ICE certification (Draft)	150 days	s 0 days	150 days	0%	Fri 2/10/20	Sun 28/2/21	NA	NA	Mon 19/10/20	Wed 17/3/21	17 days 1 day	633,640,649F days,151FF+ days							
	Submit & endorse by PM and Statutory Authorities/Gov. Dept	75 days	0 days	75 days	0%	Mon 1/3/21	Fri 14/5/21	NA	NA	Thu 18/3/21	Mon 31/5/21	17 days 0.5 d	ays 649,650	$\exists \parallel \parallel \parallel$					.	
2	Prepare DDA for AIP for Temporary Building Works (i.e. temporary management office and toilet blocks) and ICE (Final)	30 days	0 days	30 days	0%	Sat 15/5/21	Sun 13/6/21	NA	NA	Tue 1/6/21	Wed 30/6/21	17 days 0 day	vs 651							
53	Submit & endorse by PM and Statutory Authorities/Gov. Dept	90 days	0 days	90 days	0%	Mon 14/6/21	Sat 11/9/21	NA	NA	Thu 1/7/21	Tue 28/9/21	17 days 0 day	vs 652							
e: Rev.11	1 Prog with Progress	Summary			Inactive N	filestone $\diamondsuit$		Duration-or	•		Start-only	Е	I	External Mileston	ne 🔷		Critica	ıl Split		
	Split	Project Sur	nmary		Inactive S	ummary		Manual Sur	mmary Rollup		Finish-only	3	I	Deadline	4		Progre	SS	_	



								tract No. ED/																	
Ta	k Name	Duration	Actual Duration	Remaining Duration	Physical % Complete	Early Start	Early Finish	Actual Start	Actual Finish	Late Start	Late Finish	Total Slack	TRA	Predecessors	2020	3   Q4	01	2021 Q2   Q3	O4	Q1   0	2022	3   04	Q1   Q2	2023	04 0
96	Section 6	0 days	0 days	0 days	0%	Thu 18/5/23	Thu 18/5/23	NA	NA	Tue 30/5/23	Tue 30/5/23	12 days	0 days	1357FF,1546FF,		J Q4			<u> </u>			)   Q4	Q1   Q2	18/5	<u>2</u> 4   Q.
97	Section 7	0 days	0 days	0 days	0%	Wed 29/5/24	Wed 29/5/24	NA	NA	Wed 29/5/24	Wed 29/5/24	0 days	0 days	1549FF											
98	Section 8	0 days	0 days	0 days	0%	Wed 24/11/21	Wed 24/11/21	NA	NA	Thu 2/12/21	Thu 2/12/21	8 days	0 days	1144FF					<b>44</b> -2	24/11					
99	Section 9	0 days	0 days	0 days	0%	Sat 3/7/21	Sat 3/7/21	NA	NA	Mon 5/7/21	Mon 5/7/21	2 days	0 days	1222				⊕ 3/7							
700	Section 10	0 days	0 days	0 days	0%	Thu 11/5/23	Thu 11/5/23	NA	NA	Tue 30/5/23	Tue 30/5/23	19 days	0 days	1559FF									44	11/5	
701	KD1	0 days	0 days	0 days	0%	Tue 11/8/20	Tue 11/8/20	NA	NA	Fri 7/8/20	Fri 7/8/20	-4 days	0 days	758		11/R									
702	KD2		0 days	0 days	0%	Sat 17/4/21	Sat 17/4/21		NA	Sun 18/4/21	Sun 18/4/21		0 days	791,821,771,774				- myx							
703	KD3		0 days	0 days	0%	Mon 26/4/21	Mon 26/4/21		NA	Tue 1/6/21	Tue 1/6/21	36 days	-	822,821											
704	KD4						Fri 28/1/22			Mon 31/1/22				1255FF				2.0 (4)		2004					
			0 days	0 days	0%	Fri 28/1/22			NA		Mon 31/1/22	3 days	1					1		28/1					
705	KD5		0 days	0 days	0%	Fri 25/6/21		NA	NA	Fri 17/9/21	Fri 17/9/21	84 days		1252FF				(1/23/C							
706	KD6	0 days	0 days	0 days	0%	Tue 21/12/21	Tue 21/12/21		NA	Wed 29/12/21	Wed 29/12/21		0 days	883					1	21/12					
07	KD7	0 days	0 days	0 days	0%	Thu 19/8/21	Thu 19/8/21	NA	NA	Fri 3/6/22	Fri 3/6/22	288 days	0 days	1254FF					19/8						
708 Co	nstruction Works	1499 day	75.67 days	1423.33 days?	0%	Thu 16/5/19	Wed 29/5/24	Thu 16/5/19	NA	Thu 16/5/19	Wed 29/5/24	0 days?			1 111										
09	Procurement of Materials and Equipments	615 days	12.7 days	602.3 days	0%	Thu 8/8/19	Wed 1/9/21	Thu 8/8/19	NA	Thu 8/8/19	Tue 22/2/22	140 days			1 111			+							
10	Office Accommodation	21 days	21 days	0 days	100%	Thu 8/8/19	Fri 20/12/19	Thu 8/8/19	Fri 20/12/19	Thu 8/8/19	Fri 20/12/19	0 days	1 day												
11	Lift Submission Preparation	15 days	0 days	15 days	0%	Sat 12/9/20	Sat 26/9/20	NA	NA	Wed 23/9/20	Wed 7/10/20	11 days	0.5 days	173											
12	Lift Comment & Approval	21 days	0 days	21 days	0%	Sun 27/9/20	Sat 17/10/20	NA	NA	Thu 8/10/20	Wed 28/10/20	11 days	0.5 days	711											
13	Lifts ((5 nos)	180 days	0 days	180 days	0%	Sun 18/10/20	Thu 15/4/21	NA	NA	Thu 29/10/20	Mon 26/4/21	11 days	30 days	712											
14	Pumps for Pump Room next to Underpass	150 days	0 days	150 days	0%	Sat 23/5/20	Thu 19/11/20	NA	NA	Wed 8/7/20	Tue 5/1/21	37 days	30 days												
15	Elevated landscape deck soffit panels	120 days	0 days	120 days	0%	Mon 14/9/20	Sat 6/2/21	NA	NA	Thu 4/2/21	Mon 5/7/21	117 days	30 days												
16	Underpass & Depressed Rd - facades	120 days		120 days	0%	Tue 1/12/20	Thu 29/4/21		NA	Wed 12/5/21	Mon 4/10/21	129 days													
17	E & M equipment & fittings (for Open space & Promenade)	120 days		120 days	0%	Tue 6/4/21	Fri 27/8/21		NA	Mon 27/9/21	Tue 22/2/22	144 days													
18	Bridge Parapet Fabrication	120 days		120 days	0%	Mon 16/11/20			NA	Wed 26/5/21	Wed 22/9/21	191 days													
19	Pumps for Salt and Sewage Pumping Stations	150 days		150 days	0%	Mon 5/4/21	Wed 1/9/21		NA	Sun 19/9/21	Tue 15/2/22	167 days	30 days												
20	Excavation Permit	300 days	0 days	300 days	0%	Mon 31/8/20	Thu 2/9/21	NA	NA	Mon 23/11/20	Tue 1/3/22	69 days													
721	TTA Application for Junction Modification Rd L6 & D2	182 days		182 days	0%	Tue 1/9/20	Mon 1/3/21	NA	NA	Mon 23/11/20	Sun 23/5/21	83 days	2 days												
22	Interfaced DCS 3 x DN150mm chilled water pipes under contract no. 2852EM17A and 4 nos. of signaling cable along North Approach Ramp and Gate 3B (Agreed)	368 days	0 days	368 days	0%	Mon 31/8/20	Thu 2/9/21	NA	NA	Sat 27/2/21	Tue 1/3/22	180 days	3 day												
23	Section 1	842 days	107.17 days	734.83 days	0%	Thu 16/5/19	Mon 14/3/22	Thu 16/5/19	NA	Thu 16/5/19	Wed 29/5/24	657 days			1 111										
24	Agree Interface Coordination Plan with CKR & KTSP	14 days	14 days	0 days	100%	Tue 27/8/19	Wed 11/9/19	Tue 27/8/19	Wed 11/9/19	Tue 27/8/19	Wed 11/9/19	0 days	0 days	1225,1226											
25	Ground Investigation	341 days	193.02 days	147.98 days	0%	Thu 12/9/19	Thu 5/11/20	Thu 12/9/19	NA	Thu 12/9/19	Sat 13/8/22	526 days		-											
26	GI Work	318 days	180 days	138 days	57%	Thu 12/9/19	Thu 5/11/20	Thu 12/9/19	NA	Thu 12/9/19	Sat 13/8/22	526 days	0.5 days	724											
27	Part 1 - Junction Modification Rd L6 & D2	414 days	0 days	414 days	0%	Mon 5/10/20	Fri 25/2/22	NA	NA	Mon 23/11/20	Tue 1/3/22	3 days													
28	XP Application for Junction Modification Rd L6 & D2	182 days	0 days	182 days	0%	Mon 5/10/20	Sun 4/4/21	NA	NA	Mon 23/11/20	Sun 23/5/21	49 days	1 day												
29	Stage 1: Trial Pit to locate the existing underground cables and utilities	14 days	0 days	14 days	0%	Thu 20/5/21	Fri 4/6/21	NA	NA	Mon 24/5/21	Tue 8/6/21	3 days	1 day	141,375,721,728											
30	Stage 2: Trial Pit to locate the existing underground cables and utilities	14 days		14 days	0%	Sat 5/6/21	Tue 22/6/21		NA	Wed 9/6/21	Fri 25/6/21		1 day	729											
31	Stage 3: East Bound + Drop Kerb Modification + Road Marking	76 days		76 days	0%	Wed 23/6/21	Mon 20/9/21		NA	Sat 26/6/21	Fri 24/9/21		1 day	730											
32													_												
	Stage 4: TTA for Central Divider	76 days		76 days	0%	Tue 21/9/21	Tue 21/12/21		NA	Sat 25/9/21	Fri 24/12/21		1 day	731,113											
33	Stage 5: Construct 2 Dividers	51 days		51 days	0%		Fri 25/2/22		NA	Tue 28/12/21	Tue 1/3/22		1 day	732											
34	Bridge D3 (Approach Ramp and Bridge) CH1087-1444.7	812 days	91.74 days	720.26 days	0%	Thu 16/5/19	Mon 7/2/22	Thu 16/5/19	NA	Mon 11/11/19	Wed 29/5/24	687 days													
35	North Approach Ramp	636 days	66.85 days	569.15 days	0%	Wed 25/12/19	Fri 18/2/22	Wed 25/12/19	NA	Wed 25/12/19	Tue 1/3/22	9 days													
36	Procurement of Movement Joints for Bridge Works	180 days	0 days	180 days	0%	Tue 11/8/20	Sat 6/2/21	NA	NA	Fri 9/10/20	Tue 6/4/21	59 days	30 days	194,220											
37	Sheetpile Driven along North, Sourth & East Side ELS Cofferdam (assume 169 long)	4 days	4 days	0 days	100%	Tue 14/1/20	Fri 17/1/20	Tue 14/1/20	Fri 17/1/20	Tue 14/1/20	Fri 17/1/20	0 days	0.5 day												
38	KTSP Completed Driven H-pile Installation	41 days	41 days	0 days	100%	Wed 25/12/19	Mon 3/2/20	Wed 25/12/19	Mon 3/2/20	Wed 25/12/19	Mon 3/2/20	0 days													
39	Hoarding Removal along KTSP Site	5 days	5 days	0 days	100%	Tue 4/2/20	Sat 8/2/20	Tue 4/2/20	Sat 8/2/20	Tue 4/2/20	Sat 8/2/20	0 days	0.5 day	738											
tle: Roy	11 Prog with Progress	Summary			Inactive M	ilestone $\diamondsuit$		Duration-on	ıly		Start-only		С	Externa	al Milestor	e 🔷			Critical S	plit					
	May-20 Split	Project Sun			Inactive Su				nmary Rollup		Finish-only		3	Deadli		•			Progress		_				
	Milestone •	Inactive Tas	sk		Manual Ta	sk		Manual Sun	nmary		External Tas	ks		Critical	l				Manual P	rogress	_				

							Conf	tract No. ED,	/2018/01 KT	D Project												
Task Nam	ne	Duration	n Actual Duration	Remaining Duration	Physical % Complete	Early Start	Early Finish	Actual Start	Actual Finish	Late Start	Late Finish	Total Slack	TRA	Predecessors	2020	)3   Q4	2021 O1   O2   O3	04 0	202	22   Q3   Q4	4 01	2023   Q2   Q
740	Sheetpile Driven along Western ELS Cofferdam (assume 105m long)	8 days	8 days	0 days	100%	Tue 11/2/20	Wed 19/2/20	Tue 11/2/20	Wed 19/2/20	Tue 11/2/20	Wed 19/2/20	0 days	0.5 day	737,739	1 1	<u>~ Q4</u>	¥1   ¥2   ¥3	7, 0,	4 Q2		, Q1	
741	Excavattion with Shoring and Waling Installation with Rock Fill Replacement include Sand Raplacement Test with PWRL for KD1	44 days	44 days	0 days	100%	Thu 20/2/20	Wed 15/4/20	Thu 20/2/20	Wed 15/4/20	Thu 20/2/20	Wed 15/4/20	0 days	1 day									
742	Remaining Excavation with Shoring and Waling Installation with Rock Fill Replacement include Sand Raplacement Test with PWRL	37 days	0 days	37 days	0%	Tue 6/10/20	Wed 18/11/20	) NA	NA	Tue 13/10/20	Wed 25/11/20	6 days	2 days	741,761								
743	North Approach Ramp (Bays No.2,3,4&5) (Next to BEM) (KD1)	106 days	s 34.01 days	71.99 days	0%	Wed 1/4/20	Tue 11/8/20	Wed 1/4/20	NA	Wed 1/4/20	Fri 7/8/20	-3 days			<del></del>	ı						
744	Bay No.3 Base Slab with Blinding (1)+(2)	15 days	15 days	0 days	100%	Wed 1/4/20	Wed 22/4/20	Wed 1/4/20	Wed 22/4/20	Wed 1/4/20	Wed 22/4/20	0 days	0.5 days	741SS+35 day	rs 🖷							
745	Bay No.3: Wall & Column with Soffit (upto +4.6mPD) (include Wall Forme	er) 42 days	22 days	20 days	45%	Wed 22/4/20	Thu 11/6/20	Wed 22/4/20	NA	Wed 22/4/20	Thu 11/6/20	-3 days		744								
746	May 2020 Inclement Weather	3 days	0 days	3 days	0%	Fri 12/6/20	Mon 15/6/20	NA	NA	Tue 9/6/20	Thu 11/6/20	-3 days		745,74SS								
47	Bay No. 3: Wall & Column Casted and Formwork & Falsework upto Soffit	of 15 days	0 days	15 days	0%	Tue 16/6/20	Sat 4/7/20	NA	NA	Fri 12/6/20	Tue 30/6/20	-3 days	1 day	745,746								
48	Top Slab(6)+(7)  Bay No. 3: Top Slab Construction with Formwork & Falsework Erection(8)	12 days	0 days	12 days	0%	Mon 6/7/20	Sat 18/7/20	NA	NA	Thu 2/7/20	Wed 15/7/20	-3 days	1 day	747								
749	Bay No.2 Base Slab with Blinding (1)+(2)	11 days	11 days	0 days	100%	Tue 28/4/20	Tue 12/5/20	Tue 28/4/20	Tue 12/5/20	Tue 28/4/20	Tue 12/5/20	0 days	1 day	741FS+2 days								
750	Bay No.2: Wall & Column with Soffit (upto +4.6mPD) (include Wall Form			17 days	25%	Sat 16/5/20	Thu 11/6/20		NA	Sat 16/5/20	Thu 11/6/20	-1 day	1 day	749								
751	(3)+(4)+(5)  Bay No. 2: Wall & Column Casted and Formwork & Falsework upto Soffit	,		18 days	0%	Fri 12/6/20	Sat 4/7/20	NA	NA	Thu 11/6/20	Fri 3/7/20	-1 day	1 day	750								
752	Top Slab (6)+(7)  Bay No. 2: Top Slab Construction with Formwork & Falsework Erection(8)			12 days	0%	Wed 8/7/20	Tue 21/7/20		NA	Sat 4/7/20	Fri 17/7/20		1 day	751,748FF+2								
753	• • • • • • • • • • • • • • • • • • • •				100%									days								
	Bay No.4 Base Slab with Blinding (1)+(2)		15 days	0 days		Wed 1/4/20	Wed 13/5/20		Wed 13/5/20		Wed 13/5/20	0 days	-	741SS+35 day								
754	Bay No.4: Wall & Column with Soffit (upto +4.6mPD) (include Wall Forme (3)+(4)+(5)			14 days	36%	Thu 14/5/20	Tue 9/6/20	Thu 14/5/20		Thu 14/5/20	Tue 9/6/20	-3 days		753,750SS+7 days								
755	Bay No. 4: Wall & Column Casted and Formwork & Falsework upto Soffit Top Slab (6)+(7)			20 days	0%	Wed 10/6/20		NA	NA	Sat 6/6/20	Tue 30/6/20	-3 days	1 day	754								
756	Bay No. 4: Top Slab Construction with Formwork & Falsework Erection (8)	14 days	0 days	14 days	0%	Mon 6/7/20	Tue 21/7/20	NA	NA	Thu 2/7/20	Fri 17/7/20	-3 days	1 day	755,751SS+4 days								
757	Backfill (9)	12 days	0 days	12 days	0%	Wed 22/7/20	Tue 4/8/20	NA	NA	Sat 18/7/20	Fri 31/7/20	-3 days	0.5 days	756,752,748								
758	Sheetpile Extraction and Road Reinstatement (10) (KD1)	6 days	0 days	6 days	0%	Wed 5/8/20	Tue 11/8/20	NA	NA	Sat 1/8/20	Fri 7/8/20	-3 days	0.5 days	757		<b>*</b>						
759	North Approach Ramp (Bays No.5 & 6) (Next to BEM)	92 days	0 days	92 days	0%	Mon 24/8/20	Mon 23/11/20	) NA	NA	Thu 27/8/20	Thu 17/12/20	3 days										
760	Bay No.5 Base Slab with Blinding (1+2)	8 days	0 days	8 days	0%	Thu 10/9/20	Fri 18/9/20	NA	NA	Mon 14/9/20	Tue 22/9/20	3 days	1 day	749,753SS+4	da							
761	Bay No.5: Wall & Column with Soffit (upto +4.6mPD) (include Wall Forme (3+4+5)	er) 12 days	0 days	12 days	0%	Sat 19/9/20	Mon 5/10/20	NA	NA	Wed 23/9/20	Thu 8/10/20	3 days	1 day	760		ľ						
762	Bay No. 5: Wall & Column Casted and Formwork & Falsework upto Soffit	of 20 days	0 days	20 days	0%	Tue 6/10/20	Thu 29/10/20	NA	NA	Fri 9/10/20	Mon 2/11/20	3 days	1 day	761,755SS+4	1 4							
763	Top Slab (6)+(7) Bay No. 5: Top Slab Construction with Formwork & Falsework Erection &	12 days	0 days	12 days	0%	Fri 30/10/20	Thu 12/11/20	NA	NA	Tue 3/11/20	Mon 16/11/20	3 days	1 day	762,227FF								
764	Removal (8) Bay No.6 Base Slab with Blinding (1)+(2)	15 days	0 days	15 days	0%	Mon 24/8/20	Wed 9/9/20	NA	NA	Thu 27/8/20	Sat 12/9/20	3 days	1 day	741SS+35 day	rs H							
765	Bay No.6: Wall & Column with Soffit (upto +4.6mPD) (include Wall Former	er) 17 days	0 days	17 days	0%	Thu 10/9/20	Tue 29/9/20	NA	NA	Wed 7/10/20	Tue 27/10/20	21 days	1 day	764								
766	(3)+(4)+(5)  Bay No. 6: Wall & Column Casted and Formwork & Falsework upto Soffit	of 27 days	0 days	27 days	0%	Wed 30/9/20	Tue 3/11/20	NA	NA	Wed 28/10/20	Fri 27/11/20	21 days	1 day	765	$-\parallel \parallel \parallel$	4						
767	Top Slab(6)+(7)  Bay No. 6: Top Slab Construction with Formwork & Falsework Erection &	17 days	0 days	17 days	0%	Wed 4/11/20	Mon 23/11/20	) NA	NA	Sat 28/11/20	Thu 17/12/20	21 days	1 day	765,766	-							
768	Removal (8)  North Approach Ramp (Bays 7&8) (Next to BEM)		0 days	56 days	0%	Tue 26/1/21	Wed 7/4/21	NA	NA	Tue 26/1/21	Sat 17/4/21	0 days										
769	Bay 7: Blinding		0 days	1 day	0%	Tue 26/1/21	Tue 26/1/21		NA	Tue 26/1/21	Tue 26/1/21	0 days	0.5 days	816.767	_		Ţ					
770	Bay 7: Base slab				0%	Wed 27/1/21		NA	NA	Wed 27/1/21	Fri 5/2/21			816,769			<b>‡</b>					
771	•	9 days		9 days	0%	Sat 6/2/21				Wed 21/1/21 Wed 31/3/21	Sat 17/4/21	0 days										
	Bay 7: Wall		0 days	13 days			Wed 24/2/21		NA				1 day	819,770			<b>‡</b>					
772	Bay 8: Blinding		0 days	1 day	0%	Wed 27/1/21	Wed 27/1/21		NA	Fri 5/2/21	Fri 5/2/21		0.5 days									
773	Bay 8: Base slab		0 days	9 days	0%	Sat 6/2/21	Fri 19/2/21		NA	Sat 6/2/21	Fri 19/2/21	0 days		816,770,772								
774	Bay 8: Wall	13 days	0 days	13 days	0%	Sat 20/2/21		NA	NA	Sat 20/2/21	Sat 6/3/21	0 days	1 day	773,819								
775	Bays No.7&8: Backfilling	15 days	0 days	15 days	0%	Mon 8/3/21	Wed 24/3/21		NA	Thu 18/3/21	Wed 7/4/21	9 days	1 day	774,767								
776	Bays No.7&8: Extract Sheetpile	9 days	0 days	9 days	0%	Thu 25/3/21	Wed 7/4/21	NA	NA	Thu 8/4/21	Sat 17/4/21	9 days	0.5 days	775								
777	North Approach Ramp (Bays No.2,3,4) (Next to KTSP)	149 days	s 0 days	149 days	0%	Mon 17/8/20	Tue 12/1/21	NA	NA	Tue 25/8/20	Fri 5/2/21	8 days										
778	Bay No.3 Base Slab with Blinding (1)+(2)	15 days	0 days	15 days	0%	Mon 24/8/20	Wed 9/9/20	NA	NA	Tue 1/9/20	Thu 17/9/20	7 days	1 day									
779	Bay No.3: Wall & Column with Soffit (upto +4.6mPD) (include Wall Forme (3)+(4)+(5)	er) 17 days	0 days	17 days	0%	Thu 10/9/20	Tue 29/9/20	NA	NA	Wed 7/10/20	Tue 27/10/20	21 days	1 day	778								
780	Bay No. 3: Wall & Column Casted and Formwork & Falsework upto Soffit Top Slab(6)+(7)	of 27 days	0 days	27 days	0%	Wed 30/9/20	Tue 3/11/20	NA	NA	Wed 28/10/20	Fri 27/11/20	21 days	1 day	779	$\parallel \parallel \parallel$							
781	Bay No. 3: Top Slab Construction with Formwork & Falsework Erection &	17 days	0 days	17 days	0%	Wed 4/11/20	Mon 23/11/20	) NA	NA	Sat 28/11/20	Thu 17/12/20	21 days	1 day	779,780	$\parallel \parallel \parallel$							
782	Removal (8) Bay No.2 Base Slab with Blinding (1)+(2)	15 days	0 days	15 days	0%	Mon 17/8/20	Wed 2/9/20	NA	NA	Tue 25/8/20	Thu 10/9/20	7 days	1 day	778FS-21 day	s							
783	Bay No.2: Wall & Column with Soffit (upto +4.6mPD) (include Wall Former	er) 17 days	0 days	17 days	0%	Thu 3/9/20	Tue 22/9/20	NA	NA	Wed 7/10/20	Tue 27/10/20	27 days	1 day	782	+ $+$ $+$	4						
	(3)+(4)+(5)														13.67			<u> </u>				
	og with Progress	Summary Project Sur	mmary		Inactive M Inactive Su			Duration-or Manual Sur	nly 📗 mmary Rollup 🕳		Start-only Finish-only		]		xtemal Milestor eadline	ne 🔷		Critical Split Progress				ı
s of 22-May-	20 Milestone •	Inactive Ta		-	Manual Ta			Manual Sur			External Tasl	ks	-		ritical	Ť		Manual Progre	ress			

									2018/01 KT											
Task Name		Duration	Actual Duration	Remaining Duration	Physical % Complete	Early Start	Early Finish	Actual Start	Actual Finish	Late Start	Late Finish	Total Slack	TRA	Predecessors	2020 Q2   Q3   (	04 01	2021	03   04   0	2022 Q1   Q2   Q3	)3   Q4   Q
84	Bay No. 2: Wall & Column Casted and Formwork & Falsework upto Soffit of Top Slab(6)+(7)	27 days		27 days	0%	Wed 23/9/20	Tue 27/10/20	NA	NA	Wed 28/10/20	Fri 27/11/20	27 days	1 day	783		V- 1 V1				
85	Bay No. 2: Top Slab Construction with Formwork & Falsework Erection &	17 days	0 days	17 days	0%	Wed 28/10/20	Mon 16/11/20	NA	NA	Sat 28/11/20	Thu 17/12/20	27 days	1 day	783,784		<b>1</b>				
36	Removal (8) Bay No.4 Base Slab with Blinding (1)+(2)	15 days	0 days	15 days	0%	Tue 18/8/20	Thu 3/9/20	NA	NA	Wed 26/8/20	Fri 11/9/20	7 days	1 day	782SS+1 day						
87	Bay No.4: Wall & Column with Soffit (upto +4.6mPD) (include Wall Former)	17 days	0 days	17 days	0%	Fri 4/9/20	Wed 23/9/20	NA	NA	Sat 12/9/20	Sat 3/10/20	7 days	1 day	786						
88	(3)+(4)+(5)  Bay No. 4: Wall & Column Casted and Formwork & Falsework upto Soffit of	27 days	0 days	27 days	0%	Thu 24/9/20	Wed 28/10/20	NA	NA	Mon 5/10/20	Thu 5/11/20	7 days	1 day	787						
89	Top Slab(6)+(7) Bay No. 4: Top Slab Construction with Formwork & Falsework Erection &			17 days	0%	Thu 29/10/20			NA	Fri 6/11/20	Wed 25/11/20			787,788		14				
90	Removal (8)											-		,						
	Bay No.2,3&4: Backfilling upto +3.0mPD	28 days	_	28 days	0%	Tue 24/11/20	Mon 28/12/20		NA	Fri 18/12/20	Fri 22/1/21	21 days	-	789,785,781,767						
91	Bay No.4: Sheetpile Extraction (KD2)	12 days	0 days	12 days	0%	Tue 29/12/20			NA	Sat 23/1/21	Fri 5/2/21	21 days	0.5 days	790						
	North Approach Ramp (Bays No.5,6) (Next to KTSP)	141 days	0 days	141 days	0%	Wed 18/11/20	Wed 7/4/21	NA	NA	Thu 26/11/20	Sat 10/4/21	3 days				1	7			
93	Bay No.5 Base Slab with Blinding (1)+(2)	15 days	0 days	15 days	0%	Mon 23/11/20	Wed 9/12/20	NA	NA	Thu 26/11/20	Sat 12/12/20	3 days	1 day	741SS+35 days,		1				
94	Bay No.5: Wall & Column with Soffit (upto +4.6mPD) (include Wall Former) (3)+(4)+(5)	17 days	0 days	17 days	0%	Thu 10/12/20	Thu 31/12/20	NA	NA	Mon 14/12/20	Tue 5/1/21	3 days	1 day	793						
95	Bay No. 5: Wall & Column Casted and Formwork & Falsework upto Soffit of	27 days	0 days	27 days	0%	Sat 2/1/21	Tue 2/2/21	NA	NA	Wed 6/1/21	Fri 5/2/21	3 days	1 day	794						
96	Top Slab(6)+(7) Bay No. 5: Top Slab Construction with Formwork & Falsework Erection &	17 days	0 days	17 days	0%	Wed 3/2/21	Thu 25/2/21	NA	NA	Sat 6/2/21	Mon 1/3/21	3 days	1 day	794,795,791						
97	Removal (8)  Bay No.6 Base Slab with Blinding (1)+(2)	15 days	0 days	15 days	0%	Wed 18/11/20	Fri 4/12/20	NA	NA	Thu 26/11/20	Sat 12/12/20	7 days	1 day	789						
98	Bay No.6: Wall & Column with Soffit (upto +4.6mPD) (include Wall Former)			17 days	0%	Sat 5/12/20	Thu 24/12/20		NA	Mon 14/12/20	Tue 5/1/21	-		797		Ţ				
	(3)+(4)+(5)		-									-								
99	Bay No. 6: Wall & Column Casted and Formwork & Falsework upto Soffit of Top Slab(6)+(7)			27 days	0%	Mon 28/12/20			NA	Wed 6/1/21	Fri 5/2/21	-		798						
00	Bay No. 6: Top Slab Construction with Formwork & Falsework Erection & Removal (8)	17 days	0 days	17 days	0%	Fri 29/1/21	Sat 20/2/21	NA	NA	Sat 6/2/21	Mon 1/3/21	7 days	1 day	798,799						
)1	Bay No.5&6: Backfilling upto +3.0mPD	26 days	0 days	26 days	0%	Fri 26/2/21	Sat 27/3/21	NA	NA	Tue 2/3/21	Wed 31/3/21	3 days	1 day	790,800,796						
)2	Bay No.5&6: Sheetpile Extraction (KD2)	6 days	0 days	6 days	0%	Mon 29/3/21	Wed 7/4/21	NA	NA	Thu 1/4/21	Sat 10/4/21	3 days	0.5 days	801,791						
)3 N	North Approach Ramp (Bays 7&8) (Next to KTSP)	79 days	0 days	79 days	0%	Fri 29/1/21	Sat 17/4/21	NA	NA	Thu 11/2/21	Sat 17/4/21	0 days								
4	Bay 7: Base slab	9 days	0 days	9 days	0%	Fri 29/1/21	Mon 8/2/21	NA	NA	Thu 11/2/21	Wed 24/2/21	11 days	0.5 days	816,799						
5	Bay 7: Wall	12 days	0 days	12 days	0%	Mon 8/3/21	Sat 20/3/21	NA	NA	Mon 8/3/21	Sat 20/3/21	0 days	1 day	804,819,774						
5	Bay 8: Base slab		0 days	9 days	0%	Tue 9/2/21	Mon 22/2/21	NA	NA	Thu 25/2/21	Sat 6/3/21	11 days	0.5 days	804,816						
7	Bay 8: Wall	12 days		12 days	0%	Tue 23/2/21	Mon 8/3/21		NA	Mon 8/3/21	Sat 20/3/21	11 days		806,819						
3	·													, , , , , , , , , , , , , , , , , , ,						
	Bays No.7&8: Backfilling	15 days		15 days	0%	Mon 22/3/21		NA	NA	Mon 22/3/21	Sat 10/4/21	-		807,805						
9	Bays No.7&8: Extract Sheetpile		0 days	6 days	0%	Mon 12/4/21	Sat 17/4/21		NA	Mon 12/4/21	Sat 17/4/21		-	808,801,802						
	Furniture	77 days		77 days	0%	Mon 19/4/21	Wed 21/7/21	NA	NA	Thu 23/9/21	Tue 14/12/21	122 days		718						
.1	CH1087-1189: Parapet (28m per day per team) x 1 team + 6 day concreting	23 days	0 days	23 days	0%	Mon 19/4/21	Sat 15/5/21	NA	NA	Thu 23/9/21	Thu 21/10/21	130 days	2 day	809,776,821						
12	CH1087-1189: Central Median and Utilities Trough (6m per day per team) x 1 team	25 days	0 days	25 days	0%	Thu 27/5/21	Fri 25/6/21	NA	NA	Fri 22/10/21	Fri 19/11/21	122 days	1 day	811,236						
13	CH1087-1189: Road Furniture	21 days	0 days	21 days	0%	Sat 26/6/21	Wed 21/7/21	NA	NA	Sat 20/11/21	Tue 14/12/21	122 days	3 days	812,358			<b>         </b>			
14 N	North Approach Ramp: Bay No. 1	135 days	0 days	135 days	0%	Fri 14/8/20	Mon 25/1/21	NA	NA	Fri 14/8/20	Mon 25/1/21	0 days			<del>                                </del>					
15	Bay 1: Base slab	27 days	0 days	27 days	0%	Fri 14/8/20	Mon 14/9/20	NA	NA	Fri 14/8/20	Mon 14/9/20	0 days	0.5 days	834						
16	Bay 1: Wall	83 days		83 days	0%	Fri 16/10/20	Mon 25/1/21	NA	NA	Fri 16/10/20	Mon 25/1/21		3 days	819						
	Part 3G - CH1189.4 to CH1229 North Abutment	180 days		180 days	0%	Tue 15/9/20	Mon 26/4/21		NA	Tue 15/9/20	Mon 26/4/21	-								
												-								
18	North Abutment	180 days		180 days	0%	Tue 15/9/20	Mon 26/4/21		NA	Tue 15/9/20	Mon 26/4/21	0 days		015						
19	North Abutment - Base Slab	25 days		25 days	0%	Tue 15/9/20	Thu 15/10/20		NA	Tue 15/9/20	Thu 15/10/20			815						
20	North Abutment Wall (3.85m thk)	37 days	0 days	37 days	0%	Tue 26/1/21	Fri 12/3/21		NA	Tue 26/1/21	Fri 12/3/21	0 days	1 day	816						
21	North Abutment Wall (0.5m thk) (KD2) (KD3)	28 days	0 days	28 days	0%	Sat 13/3/21	Sat 17/4/21	NA	NA	Sat 13/3/21	Sat 17/4/21	0 days	1 day	820						
2	Install bridge bearing	7 days	0 days	7 days	0%	Mon 19/4/21	Mon 26/4/21	NA	NA	Mon 19/4/21	Mon 26/4/21	0 days	0.5 days	821,736				<b>H</b>		
3 A	At Grade Road Works CH1000-2124	157 days	0 days	157 days	0%	Tue 10/8/21	Fri 18/2/22	NA	NA	Thu 4/11/21	Tue 1/3/22	9 days							<b>40</b>	
4	CH1000-1087 At grade road works	60 days	0 days	60 days	0%	Tue 10/8/21	Thu 21/10/21	NA	NA	Wed 15/12/21	Tue 1/3/22	106 days	1 day	776,809,332,341					<b>4.</b>	
5	CH1444.7-1560 At grade road works	45 days		45 days	0%		Fri 18/2/22		NA	Wed 5/1/22	Tue 1/3/22	9 days	-	1293,826,219				-		
26	Ch2050 to 2124: At grade road works	50 days		50 days	0%		Tue 21/12/21		NA	Thu 4/11/21	Tue 4/1/22			1438,219						
					0%								. any	130,217						
	ge D3 Bored Pile		17 days	0 days			Thu 5/12/19				Thu 5/12/19	0 days	0.5.1							
28 P	Pre-drilling Works	15 days	15 days	0 days	100%	Tue 19/11/19	Thu 5/12/19	Tue 19/11/19	1hu 5/12/19	Tue 19/11/19	Thu 5/12/19	0 days	u.5 day							
le: Rev.11 Prog v	vith Progress	Summary			Inactive M	ilestone $\Diamond$		Duration-on			Start-only				l Milestone	<b>♦</b>		Critical Split		
-9.	Split	Project Sur	nmary		Inactive Su	mmary		Manual Sun	nmary Rollup 🔳		Finish-only		3	Deadlin	e	4		Progress	_	

										D Project														
Task Na	ame	Duration	n Actual Duration	Remaining Duration	Physical % Complete	Early Start	Early Finish	Actual Start	Actual Finish	Late Start	Late Finish	Total Slack	TRA	Predecessors	2020 Q2 Q	23   Q4	01   0	2021 22   Q3	Q4	Q1   O2	2022 2 Q3	Q4		2023   Q3   Q
29	Part 3C - CH1229 to CH1279	823 day	s? 137.51 days	685.49 days?	0%	Thu 16/5/19	Sat 19/2/22	Thu 16/5/19	NA	Mon 11/11/19	Wed 29/5/24	676 da												
330	Abutment A01 Piling	0 days	0 days	0 days	0%	Thu 16/5/19	Thu 16/5/19	NA	NA	Wed 29/5/24	Wed 29/5/24	1841 d			<b>      </b>									
831	CH1189: Bored Pile (A01-BP1) by Rig 1(Contractor Bear DDA Approval Risk)	61 days	40 days	21 days	66%	Tue 31/3/20	Tue 16/6/20	Tue 31/3/20	NA	Tue 31/3/20	Tue 16/6/20	0 days	1 day	839										
832	CH1189: Bored Pile (A01-BP2) by Rig 1 (Contractor Bear DDA Approval Risk	29 days	29 days	0 days	100%	Mon 13/4/20	Tue 19/5/20	Mon 13/4/20	Tue 19/5/20	Mon 13/4/20	Tue 19/5/20	0 days	1 day											
833	Abutment A01: Pile Testing (28d curing & 14 test) - 1 full-core to be carried out	t 37 days	0 days	37 days	0%	Wed 17/6/20	Fri 31/7/20	NA	NA	Wed 17/6/20	Fri 31/7/20	0 days	5 days	831,832										
834	Abutment A01: Proof-drilling Works	11 days	0 days	11 days	0%	Sat 1/8/20	Thu 13/8/20	NA	NA	Sat 1/8/20	Thu 13/8/20	0 days	2 day	833										
835	Mobilization of plant and material	6 days	6 days	0 days	100%	Mon 11/11/19	Sat 16/11/19	Mon 11/11/19	Sat 16/11/19	Mon 11/11/19	Sat 16/11/19	0 days	1 days	14,194,193										
336	CH1229: Pre-drilling Works	21 days	21 days	0 days	100%	Tue 19/11/19	Thu 12/12/19	Tue 19/11/19	Thu 12/12/19	Tue 19/11/19	Thu 12/12/19	0 days	0.5 days											
337	Pier P01 Piling, Pilecap & Pier	0 days	0 days	0 days	0%	Thu 16/5/19	Thu 16/5/19	NA	NA	Wed 29/5/24	Wed 29/5/24	1841 d												
338	Bored pile (P01-BP2) @ CH1229 by Rig 1 (Contractor Bear DDA Approval	44 days	44 days	0 days	100%	Fri 17/1/20	Wed 11/3/20	Fri 17/1/20	Wed 11/3/20	Fri 17/1/20	Wed 11/3/20	0 days	0.5 days											
339	Risk) Bored pile (P01-BP1) @ CH1229 by Rig 1 (Contractor Bear DDA Approval	38 days	38 days	0 days	100%	Mon 24/2/20	Wed 8/4/20	Mon 24/2/20	Wed 8/4/20	Mon 24/2/20	Wed 8/4/20	0 days	0.5 days	838SS+30 days										
40	Risk) Pier P01: Pile Testing (18d curing & 14 test)	45 days	0 days	45 days	0%	Sat 23/5/20	Thu 16/7/20	NA	NA	Mon 6/7/20	Wed 26/8/20	35 days	3 days	839	┤ <b>╁</b> ╢									
841	Pier P01: Proof-drilling Works	10 days	0 days	10 days	0%	Fri 17/7/20	Tue 28/7/20	NA	NA	Thu 27/8/20	Mon 7/9/20	35 days	1 day	839,840	+ $+$ $+$									1
342	Pile Cap P01 @ CH1229	98 days	0 days	98 days	0%	Mon 15/6/20	Sun 11/10/20	NA	NA	Sat 29/8/20	Fri 13/11/20	28 days			┤│┟╫									
843	-			17 days	0%	Wed 29/7/20	Mon 17/8/20		NA	Tue 8/9/20	Sat 26/9/20	35 days	1 day	841	-									
844	Pilecap - Formwork Design and Method Statement Submission		0 days	0 days	0%	Mon 15/6/20	Mon 15/6/20		NA	Sat 29/8/20	Sat 29/8/20	75 days	_		<b>♦</b> 15/	/6								
845	Pilecap - Formwork Design and Method Statement Comment & Appraoval		0 days	30 days	0%	Mon 15/6/20	Tue 14/7/20		NA	Sat 29/8/20	Sun 27/9/20	75 days	1	844										
846	Pilecap structure		0 days	24 days	0%	Tue 18/8/20	Mon 14/9/20		NA	Mon 28/9/20	Wed 28/10/20			845,843	<b>   </b>									
347	Backfill		0 days	14 days	0%	Tue 15/9/20	Wed 30/9/20		NA	Thu 29/10/20	Fri 13/11/20	35 days		846										
848	Pier - Formwork Design and Method Statement Submission		0 days		0%	Mon 7/9/20	Mon 7/9/20		NA NA	Sat 10/10/20	Sat 10/10/20	33 days		010										
349	_			0 days	0%	Mon 7/9/20	Sun 11/10/20		NA NA	Sat 10/10/20 Sat 10/10/20	Fri 13/11/20			848										
	Pier - Formwork Design and Method Statement Comment & Appraoval		0 days	35 days								33 days												
350	Pier P01 @ CH1229		0 days	49 days	0%	Wed 28/10/20			NA	Sat 14/11/20	Wed 13/1/21	15 days	-	847,211,849										
351	CH1269: Pre-drilling Works		30 days	0 days	0%	Wed 20/11/19				Wed 20/11/19	Thu 19/12/19			835,836										
352	Abandon the Installed defected Bored pile (P02-BP2) @ CH1269	35 days	35 days	0 days	100%	Tue 11/2/20		Tue 11/2/20			Sun 22/3/20		0.5 days	851										
353	Pier P02 Piling, Pilecap & Pier	1 day?	0 days	1 day?	0%	Thu 16/5/19	Thu 16/5/19	NA	NA	Wed 29/5/24	Wed 29/5/24	1840 d												
354	Predrilling works for Bored pile (P02-BP2)(Abandoned) @ CH1269		0 days	11 days	0%	Wed 3/6/20	Mon 15/6/20	NA	NA	Tue 9/6/20	Sat 20/6/20	5 days	0.5 days	852										
355	Casing Extraction for Abandoned P02-BP2 Bored Pile	20 days	0 days	20 days	0%	Sat 20/6/20	Wed 15/7/20	NA	NA	Mon 22/6/20	Thu 16/7/20	1 day	1 day	854										
856	Bored pile (P02-BP2)(Remedial) @ CH1269	30 days	0 days	30 days	0%	Thu 16/7/20	Wed 19/8/20	NA	NA	Fri 17/7/20	Thu 20/8/20	1 day	2 days	855,854		<b>h</b>								
357	Bored pile (P02-BP1) @ CH1269 (Contractor Bear DDA Approval Risk) (Rig 2	26 days	26 days	0 days	100%	Fri 21/2/20	Sat 18/4/20	Fri 21/2/20	Sat 18/4/20	Fri 21/2/20	Sat 18/4/20	0 days	0.5 days	851	1. THE									
358	Pile Testing (18d curing & 14 test)	32 days	0 days	32 days	0%	Thu 20/8/20	Fri 25/9/20	NA	NA	Wed 2/9/20	Sat 10/10/20	11 days	0.5 days	852,857,856	<b>                                     </b>									
359	Proof-drilling Works	9 days	0 days	9 days	0%	Sat 26/9/20	Thu 8/10/20	NA	NA	Mon 12/10/20	Wed 21/10/20	11 days	1 day	839,840,858		THE L								
860	Pile Cap ELS - Temp. Works Design and Method Statement Submission	0 days	0 days	0 days	0%	Mon 29/6/20	Mon 29/6/20	NA	NA	Tue 22/9/20	Tue 22/9/20	85 days	1 day		1 29	9/6								
861	Pile Cap ELS - Temp. Works Design and Method Statement Comment &	30 days	0 days	30 days	0%	Mon 29/6/20	Tue 28/7/20	NA	NA	Tue 22/9/20	Wed 21/10/20	85 days	1 day	860										
362	Appraoval Pile Cap P02 @ CH1270	120 day	s 0 days	120 days	0%	Mon 24/8/20	Sat 16/1/21	NA	NA	Thu 22/10/20	Fri 29/1/21	11 days					•							
363	Drive sheetpile (~75m). Prod. Rate: 5m/day/side/team	17 days	0 days	17 days	0%	Fri 9/10/20	Thu 29/10/20	) NA	NA	Thu 22/10/20	Wed 11/11/20	11 days	2 days	861,858,140,85	9	1								
364	Excavation ~1677m3 & lateral support. Prod. Rate: 100m3/day/team	18 days	0 days	18 days	0%	Fri 30/10/20	Thu 19/11/20	) NA	NA	Thu 12/11/20	Wed 2/12/20	11 days	1 days	863	$- \  \cdot \  \cdot \ $									
365	Pilecap Formwork Design and Method Statement Submission	0 days	0 days	0 days	0%	Mon 24/8/20	Mon 24/8/20	NA	NA	Thu 12/11/20	Thu 12/11/20	80 days	1 day		$\parallel \parallel \parallel \parallel$	<b>♠</b> 24/8								
366	Pilecap Formwork - Design and Method Statement Comment & Appraoval	21 days	0 days	21 days	0%	Mon 24/8/20	Sun 13/9/20	NA	NA	Thu 12/11/20	Wed 2/12/20	80 days	1 day	865	$\parallel \parallel \parallel$									
367	Pilecap structure	36 days	0 days	36 days	0%	Fri 20/11/20	Mon 4/1/21	NA	NA	Thu 3/12/20	Sat 16/1/21	11 days	1 day	866,864,863	$\left\{ \left[ $									
368	Backfill and extract sheet pile		0 days	11 days	0%	Tue 5/1/21	Sat 16/1/21	NA	NA	Mon 18/1/21	Fri 29/1/21	11 days		867	$\  \  \ $									
69	Pier - Temp. Works Design and Method Statement Submission		0 days	0 days	0%	Mon 7/9/20	Mon 7/9/20		NA	Thu 31/12/20	Thu 31/12/20				$\parallel \parallel \parallel$	7/9								
70	Pier - Temp. Works Design and Method Statement Comment & Appraoval		0 days	30 days	0%	Mon 7/9/20	Tue 6/10/20		NA	Thu 31/12/20	Fri 29/1/21	115 days		869		411								
871	Pier P02 @ CH1270		0 days	49 days	0%	Mon 18/1/21	Thu 18/3/21		NA	Sat 30/1/21	Wed 31/3/21	11 days		868,211,870	-									
													1 uay	000,211,070										
872	Stage 1: Bridge deck between CH1229-1311		o days	340 days	0%	Mon 2/11/20			NA	Tue 19/1/21	Wed 29/12/21		1 d											
873	Bridge Deck - Temp. Works Design and Method Statement Submission	o days	0 days	0 days	0%	Mon 2/11/20	Mon 2/11/20	INA	NA	Tue 19/1/21	Tue 19/1/21	78 days	1 day			2/								
tle: Rev.11 F	Prog with Progress	Summary			Inactive Mi			Duration-or			Start-only		[		temal Mileston				Critical Spli	t				
s of 22-May	Split	Project Sur Inactive Ta			Inactive Su  Manual Tas			Manual Sur Manual Sur	mmary Rollup		Finish-only  External Tas	1	]		adline itical	4			Progress Manual Prog				_	

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Task Nan	ne	Duration	Actual Duration	Remaining Duration	Physical % Complete	Early Start	Early Finish	Actual Start	Actual Finis	sh Late Start	Late Finish	Total Tl Slack	RA Predeces		20 Q3   Q4	01   02	021   Q3   Q4	4 Q1	2022	2 Q3   Q4	4 01	2023   Q2   Q	
874	Bridge Deck - Temp. Works Design and Method Statement Comment &	35 days		35 days	0%	Mon 2/11/20	Sun 6/12/20	NA	NA	Tue 19/1/21	Mon 22/2/21	78 days 1	day 873	Q2		Q1 Q2				Q3   Q4	, QI		52   Q
875	Appraoval CH1229-1311: Deck Falsework erection Part 1	32 days	0 days	32 days	0%	Tue 23/2/21	Wed 31/3/21	NA	NA	Tue 23/2/21	Wed 31/3/21	0 days 1	day 874,922										
876	CH1229-1311: Deck Falsework erection Part 2	28 days	0 days	28 days	0%	Thu 1/4/21	Fri 7/5/21	NA	NA	Thu 1/4/21	Fri 7/5/21	0 days 3	days 875,871			<b>1</b>	,						
877	CH1229-1311: Structure deck	50 days	0 days	50 days	0%	Wed 7/4/21	Sat 5/6/21	NA	NA	Wed 7/4/21	Sat 5/6/21	0 days 2	day 475,483,	736,875									
878	CH1229-1311: Prestressing	18 days		18 days	0%	Thu 24/6/21	Thu 15/7/21	NA	NA	Thu 24/6/21	Thu 15/7/21	0 days 0.	5 day 877FS+1	14 days									
879	CH1229-1311: Falsework Under Main Deck Removal	12 days		12 days	0%	Fri 16/7/21	Thu 29/7/21		NA	Fri 16/7/21	Thu 29/7/21		5 day 878	- Talays			T.J. IIII						
880							Thu 7/10/21																
	CH1229-1311: Utility Trough (0.67m per day per team) x 4 team	70 days		70 days	0%	Fri 16/7/21			NA	Thu 22/7/21	Wed 13/10/21		days 219,878										
881	CH1229-1311: Central Median (6m per day per team) x 2 team	31 days		31 days	0%	Fri 16/7/21	Fri 20/8/21		NA	Sat 2/10/21		65 days 3	days 878										
882	CH1229-1311: Parapet (28m per day per team) x 2 team + 6x2 day concretin	ng 21 days	0 days	21 days	0%	Fri 8/10/21	Tue 2/11/21	NA	NA	Fri 15/10/21	Mon 8/11/21	5 days 3	days 880				Í-,						
383	CH1229-1311: Removal of Falsework (KD6)	42 days	0 days	42 days	0%	Wed 3/11/21	Tue 21/12/21	NA	NA	Tue 9/11/21	Wed 29/12/21	5 days 6	days 880,882,	881									
884	CH1229-1311: Road Furniture	15 days	0 days	15 days	0%	Sat 21/8/21	Tue 7/9/21	NA	NA	Sat 27/11/21	Tue 14/12/21	81 days 1	day 881,358				111						
385	Part 3D - CH1279 to CH1311	196 days	0 days	196 days	0%	Mon 7/6/21	Sat 29/1/22	NA	NA	Wed 16/6/21	Fri 11/2/22	7 days											
886	Stage 1: Bridge deck between CH1269-1311	196 days	0 days	196 days	0%	Mon 7/6/21	Sat 29/1/22	NA	NA	Wed 16/6/21	Fri 11/2/22	7 days						1					
887	CH1269-1311: Structure deck	50 days	0 days	50 days	0%	Mon 7/6/21	Thu 5/8/21	NA	NA	Wed 16/6/21	Fri 13/8/21	7 days 2	day 475,483,	736,877									
888	Prestressing CH1269 - 1311 Bridge Spans	21 days	0 days	21 days	0%	Mon 23/8/21	Wed 15/9/21	NA	NA	Tue 31/8/21	Fri 24/9/21	7 days 3	day 887FS+1	14 days			4						
889	CH1269-1311: Utility Trough (0.67m per day per team) x 2 team	64 days		64 days	0%	Thu 16/9/21	Thu 2/12/21		NA	Sat 25/9/21	Fri 10/12/21		5 day 888,219										
890	CH1269-1311: Parapet (28m per day per team) x 1 team + 6 day	17 days		17 days	0%	Fri 3/12/21	Wed 22/12/2		NA	Sat 11/12/21	Mon 3/1/22		days 889					<b>Y</b>					
	concreting																						
891	CH1269-1311: Central Median (6m per day per team) x 1 team	15 days		15 days	0%	Thu 23/12/21	Wed 12/1/22		NA	Wed 5/1/22	Fri 21/1/22	8 days 1											
892	CH1269-1311: Road Furniture	15 days		15 days	0%	Thu 13/1/22	Sat 29/1/22		NA	Sat 22/1/22	Fri 11/2/22		day 891,358										
393	Stage2: Bridge deck between CH1189-1229	823 days	?0 days	823 days?	0%	Thu 16/5/19	Sat 19/2/22	NA	NA	Tue 27/4/21	Wed 29/5/24	579 da											
394	CH1189-1229: Deck Falsework erection	1 day?	0 days	1 day?	0%	Thu 16/5/19	Thu 16/5/19	NA	NA	Wed 29/5/24	Wed 29/5/24	1840 d											
895	CH1189-1229: Deck Falsework erection	22 days	0 days	22 days	0%	Tue 27/4/21	Mon 24/5/21	NA	NA	Tue 27/4/21	Mon 24/5/21	0 days 1	day 850,822										
896	CH1189-1229: Structure deck	27 days	0 days	27 days	0%	Tue 25/5/21	Fri 25/6/21	NA	NA	Tue 25/5/21	Fri 25/6/21	0 days 2	day 895,475,	483									
397	CH1189-1229: Prestressing	18 days	0 days	18 days	0%	Wed 14/7/21	Tue 3/8/21	NA	NA	Wed 14/7/21	Tue 3/8/21	0 days 1	day 896FS+1	14 days			<b>16</b>						
398	CH1189-1229: Falsework Under Main Deck Removal	15 days	0 days	15 days	0%	Wed 4/8/21	Fri 20/8/21	NA	NA	Wed 4/8/21	Fri 20/8/21	0 days 3	days 878,897				4						
399	CH1189-1229: Utility Trough (0.67m per day per team) x 2 team	63 days	0 days	63 days	0%	Wed 4/8/21	Tue 19/10/21	NA	NA	Wed 13/10/21	Tue 28/12/21	58 days 3	days 219,897										
900	CH1189-1229 : Central Median (6m per day per team) x 1 team	16 days		16 days	0%	Sat 21/8/21	Wed 8/9/21		NA	Fri 21/1/22	Fri 11/2/22	125 days 3											
901	CH1189-1229: Parapet (28m per day per team) x 1 team + 6 day concreting			20 days	0%	Wed 3/11/21	Thu 25/11/21		NA	Mon 17/1/22	Fri 11/2/22	61 days 5					III .						
902	CH1189-1229: Road Furniture	15 days		15 days	0%	Mon 31/1/22	Sat 19/2/22		NA	Sat 12/2/22	Tue 1/3/22		day 900,892,	.358,901									
903	Part 3E - CH1311 to CH1372		94.1 days	557.9 days	0%	Tue 12/11/19	Fri 21/1/22	Tue 12/11/19	NA	Tue 12/11/19	Wed 29/5/24	698 days						1					
904	Pre-drilling Works	31 days	31 days	0 days	0%	Tue 12/11/19	Tue 17/12/19	Tue 12/11/19	Tue 17/12/1	9 Tue 12/11/19	Tue 17/12/19	0 days 0.	5 day										
905	Bored pile (P03-BP1) @ CH1311 (Rig 2) (Contractor Bear DDA Design Risk)	40 days	40 days	0 days	100%	Tue 17/3/20	Fri 8/5/20	Tue 17/3/20	Fri 8/5/20	Tue 17/3/20	Fri 8/5/20	0 days 0.	5 day 904	<b>—</b>									
906	Bored pile (P03-BP2) @ CH1311 (Contractor Bear DDA Design Risk) (Rig 2)	36 days	25 days	11 days	69%	Wed 22/4/20	Thu 4/6/20	Wed 22/4/20	NA	Wed 22/4/20	Thu 4/6/20	0 days 3	day										
907	Pile Testing (18 curing & 14 test)	35 days	0 days	35 days	0%	Sat 6/6/20	Sat 18/7/20	NA	NA	Sat 6/6/20	Sat 18/7/20	0 days 3	day 906FS+1	l day,90.	<b>-</b>								
908	Proof-drilling Works	11 days	0 days	11 days	0%	Mon 20/7/20	Fri 31/7/20	NA	NA	Mon 20/7/20	Fri 31/7/20	0 days 2	days 907										
909	Pile Cap P03 @ CH1311	76 days	0 days	76 days	0%	Tue 7/7/20	Mon 5/10/20	NA	NA	Fri 31/7/20	Wed 29/5/24	21 days			<b>     </b>								
910	Pile Cap @ CH1311 by Open Cut	46 days		46 days	0%	Sat 1/8/20	Wed 23/9/20		NA	Wed 28/10/20	Sat 19/12/20	72 days	908										
911	Pilecap Formwork Design and Method Statement Submission	0 days		0 days	0%	Tue 7/7/20	Tue 7/7/20		NA	Tue 30/4/24	Tue 30/4/24		day		77								
												days		'									
912	Pilecap Formwork Design and Method Statement Comment & Appraoval	30 days		30 days	0%	Tue 7/7/20	Wed 5/8/20		NA	Tue 30/4/24	Wed 29/5/24	days	day 911										
913	Excavation with Shoring Installation ~2600m3 Prod. Rate: 160m3/day/team			17 days	0%	Sat 1/8/20	Thu 20/8/20		NA	Sat 1/8/20	Thu 20/8/20		day 908										
914	Pilecap Formwork - design and Method Statement Submission	0 days	0 days	0 days	0%	Mon 20/7/20	Mon 20/7/20	NA	NA	Fri 31/7/20	Fri 31/7/20	11 days 1	day		20/7								
915	Pilecap Formwork - Design and Method Statement Comment & Appraoval	21 days	0 days	21 days	0%	Mon 20/7/20	Sun 9/8/20	NA	NA	Fri 31/7/20	Thu 20/8/20	11 days 1	day 914										
916	Pilecap structure	24 days	0 days	24 days	0%	Fri 21/8/20	Thu 17/9/20	NA	NA	Fri 21/8/20	Thu 17/9/20	0 days 1	day 915,908,	913									
917	Backfill	13 days	0 days	13 days	0%	Fri 18/9/20	Mon 5/10/20	NA	NA	Fri 18/9/20	Mon 5/10/20	0 days 1	day 916										
918	Agree Interface Coordination Plan with CKP-KTW (HY/2014/07)	14 days	0 days	14 days	0%	Tue 6/10/20	Wed 21/10/20	0 NA	NA	Tue 6/10/20	Wed 21/10/20	0 days 0	days 917		21.	/10							
						<b>a</b>	1		,						<u>                                     </u>			10."			ЩЩ		
	rog with Progress Task Split	Summary Project Sun	nmary		Inactive M Inactive St			Duration-on Manual Sur	nly nmary Rollup		Start-only Finish-only	[		External Mil Deadline	estone 🔷		Critica Progra	al Split ess	-				
as of 22-May-	20 Milestone	Inactive Ta			Manual Ta			Manual Sur			External Tasl			Critical	Ĭ			al Progress	_				

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Task Na	ame	Duration	Actual Duration	Remaining Duration	Physical % Complete	Early Start	Early Finish	Actual Start	Actual Finis	h Late Start	Late Finish	Total TRA Slack	Predecessors	2020 O2 0	03   Q4		2021   O3   C	Q4 Q1	202	Q3   Q4	01	2023 Q2   Q3	04
919	Allow access to CKR-KTW contractor for sheet pile wall installation. PS App.1.18 2.7(A)(c)	60 days		60 days	0%	Thu 22/10/20	Sun 20/12/20	) NA	NA	Thu 22/10/20	Sun 20/12/20	0 days 0 days	917,918			\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \							_ ~+
920	Pier - Temp. Works Design and Method Statement Submission	0 days	0 days	0 days	0%	Mon 12/10/20	Mon 12/10/2	0 NA	NA	Mon 16/11/20	Mon 16/11/20	35 days 1 day		1	12/10								
921	Pier - Temp. Works Design and Method Statement Comment & Approval	35 days	0 days	35 days	0%	Mon 12/10/20	Sun 15/11/20	) NA	NA	Mon 16/11/20	Sun 20/12/20	35 days 1 day	920	$\{\ \cdot\ $									
922	Pier P03 @ CH1311	49 days	0 days	49 days	0%	Mon 21/12/20	Mon 22/2/21	NA	NA	Mon 21/12/20	Mon 22/2/21	0 days 1 day	916,919,850SS+										
923	Pre-drilling Works	15 days	15 days	0 days	100%	Wed 4/12/19	Wed 18/12/1	9 Wed 4/12/19	Wed 18/12/.	Wed 4/12/19	Wed 18/12/19	0 days 0.5 day	'S										
924	Diversion of existing 150mm dia. Watermain (agreed)		42 days	12 days	78%	Sat 28/3/20	Fri 5/6/20	Sat 28/3/20	NA	Sat 28/3/20	Sat 14/11/20	134 days 2 days											
925	Bored pile (P04-BP2) @ CH1351 (Rig 2)	52 days		51 days	0%	Fri 22/5/20	Wed 21/10/2	0 Fri 22/5/20	NA	Fri 22/5/20	Tue 19/1/21	73 days 3 days	923,856										
926	Bored pile (P04-BP1) @ CH1351 (Rig 2)	53 days		53 days	0%	Tue 11/8/20	Tue 13/10/20		NA	Mon 16/11/20	Tue 19/1/21	80 days 3 days		5									
927					0%	Thu 22/10/20	Wed 2/12/20		NA	Wed 20/1/21	Thu 4/3/21		926,925										
	Pile Testing (14d curing & 14 test)	35 days		35 days								73 days 3 days											
928	Proof-drilling Works	11 days		11 days	0%		Tue 15/12/20		NA	Fri 5/3/21	Wed 17/3/21	73 days 2 days											
929	Pile Cap P04 @ CH1351 with ELS	47 days		47 days	0%	Wed 16/12/20	Thu 11/2/21	NA	NA	Thu 1/4/21	Mon 31/5/21	85 days	933SS,928			<b>-</b>							
930	Pile Cap @ CH1351	97 days	0 days	97 days	0%	Mon 2/11/20	Mon 1/3/21	NA	NA	Tue 16/2/21	Mon 31/5/21	73 days				71							
931	Pilecap ELS- Design and Method Statement Submission	0 days	0 days	0 days	0%	Mon 2/11/20	Mon 2/11/20	NA	NA	Tue 16/2/21	Tue 16/2/21	106 days 1 day			<b>4</b> 2/11								
932	Pilecap ELS - Design and Method Statement Comment & Appraoval	30 days	0 days	30 days	0%	Mon 2/11/20	Tue 1/12/20	NA	NA	Tue 16/2/21	Wed 17/3/21	106 days 1 day	931										
933	Drive sheetpile (~75m). Prod. Rate: 10m/day/side/team	10 days	0 days	10 days	0%	Wed 16/12/20	Tue 29/12/20	) NA	NA	Thu 18/3/21	Mon 29/3/21	73 days 2 days	932,928	1									
934	Excavation with Shoring Installation ~2600m3 Prod. Rate: 160m3/day/team	19 days	0 days	19 days	0%	Wed 30/12/20	Thu 21/1/21	NA	NA	Tue 30/3/21	Fri 23/4/21	73 days 2 day	933										
935	Pilecap Formwork- Design and Method Statement Submission	0 days	0 days	0 days	0%	Tue 1/12/20	Tue 1/12/20	NA	NA	Thu 25/3/21	Thu 25/3/21	114 days 1 day			1/	12							
936	Pilecap Formworks - Design and Method Statement Comment & Appraoval	30 days	0 days	30 days	0%	Tue 1/12/20	Wed 30/12/2	0 NA	NA	Thu 25/3/21	Fri 23/4/21	114 days 1 day	935										
937	Pile Cap structure	19 days	0 days	19 days	0%	Fri 22/1/21	Tue 16/2/21	NA	NA	Sat 24/4/21	Mon 17/5/21	73 days 1 day	846,936,934										
938	Backfill and extract sheet pile	11 days	0 days	11 days	0%	Wed 17/2/21	Mon 1/3/21	NA	NA	Tue 18/5/21	Mon 31/5/21	73 days 2 days	937	-									
939	Pier - Temporary Design and Method Statement Submission	0 days		0 days	0%	Mon 4/1/21	Mon 4/1/21		NA	Sun 2/5/21	Sun 2/5/21	118 days 1 day		-		4)							
940	Pier - Temporary Design and Method Statement Comment & Appraoval	30 days		30 days	0%	Mon 4/1/21	Tue 2/2/21	NA	NA	Sun 2/5/21	Mon 31/5/21	118 days 1 day	939	-									
941	Pier P04 @ CH1351				0%	Tue 2/3/21	Fri 30/4/21		NA	Tue 1/6/21	Thu 29/7/21		938,922,211,940										
		49 days		49 days								73 days 1 day	930,922,211,940										
942	Stage 3: Bridge deck between CH1311-1351	145 days		145 days	0%	Fri 30/7/21	Fri 21/1/22		NA	Fri 30/7/21	Sat 29/1/22	0 days 1 day						11111111					
943	CH1311-1351: Deck Falsework erection	21 days	0 days	21 days	0%	Fri 30/7/21	Mon 23/8/21	NA	NA	Fri 30/7/21	Mon 23/8/21	0 days 3 days	941,922,879										
944	CH1311-1351: Structure deck	30 days		30 days	0%	Tue 24/8/21	Tue 28/9/21	NA	NA	Tue 24/8/21	Tue 28/9/21	0 days 5 days	475,483,736,896	6									
945	CH1311-1351: Prestressing	21 days	0 days	21 days	0%	Mon 18/10/21	Wed 10/11/2	1 NA	NA	Mon 18/10/21	Wed 10/11/21	0 days 3 days	944FS+14 days,	,8			l III Y	<b>\</b>					
946	CH1311-1351: Utility Trough (0.67m per day per team) x 4 team	30 days	0 days	30 days	0%	Thu 11/11/21	Wed 15/12/2	1 NA	NA	Fri 26/11/21	Mon 3/1/22	13 days 0.5 day	219,880,945					<b>Y</b>					
947	CH1311-1351: Central Median (6m per day per team) x 2 team	15 days	0 days	15 days	0%	Thu 11/11/21	Sat 27/11/21	NA	NA	Wed 5/1/22	Fri 21/1/22	44 days 3 days	945										
948	CH1311-1351: Parapet (28m per day per team) x 2 team + 6 day concreting	16 days	0 days	16 days	0%	Thu 23/12/21	Thu 13/1/22	NA	NA	Tue 4/1/22	Fri 21/1/22	7 days 1 day	945,888,890,946	6									
949	CH1311-1351: Road Furniture	7 days	0 days	7 days	0%	Fri 14/1/22	Fri 21/1/22	NA	NA	Sat 22/1/22	Sat 29/1/22	7 days 1 day	947,358,948					74.	_				
950	Part 1 - CH1372 to CH1386	149 days	0 days	149 days	0%	Mon 23/8/21	Tue 22/2/22	NA	NA	Mon 23/8/21	Tue 1/3/22	0 days											
951	Bridge deck between CH1351-1386	149 days	0 days	149 days	0%	Mon 23/8/21	Tue 22/2/22	NA	NA	Mon 23/8/21	Tue 1/3/22	0 days		-									
952	CH1351-1386: Deck Falsework erection	22 days	0 days	22 days	0%	Mon 23/8/21	Thu 16/9/21	NA	NA	Mon 23/8/21	Thu 16/9/21	0 days 4 days	941,922,898FS+	+			4						
953	CH1351-1386: Structure deck	30 days		30 days	0%	Fri 17/9/21	Mon 25/10/2	1 NA	NA	Fri 17/9/21	Mon 25/10/21	0 days 5 days	952,736,976	-									
954	CH1351-1386: Prestressing	14 days		14 days	0%				NA	Thu 11/11/21	Fri 26/11/21	0 days 5 days						<b>T</b>					
955	CH1351-1360. Flesticssing  CH1351 - CH1386: Utility Trough (0.67m per day per team) x 4 team	30 days			0%	Sat 27/11/21	Tue 4/1/22		NA	Sat 27/11/21	Tue 4/1/22	0 days 3 days		1									
956				30 days										<b>↓     </b>									
	CH1351 - CH1386: Central Median (6m per day per team) x 1 team	15 days		15 days	0%	Sat 27/11/21	Tue 14/12/21		NA	Sat 27/11/21	Tue 14/12/21	0 days 3 days											
957	CH1351 - CH1386: Parapet (28m per day per team) x 1 team + 6 day concreting	20 days		20 days	0%	Wed 5/1/22	Thu 27/1/22		NA	Wed 12/1/22	Mon 7/2/22	6 days 4 days		1									
958	CH1351-1386 Falsework removal	19 days		19 days	0%	Fri 28/1/22	Tue 22/2/22		NA	Tue 8/2/22	Tue 1/3/22	6 days 1 day	955,957										
959	CH1351 - CH1386: Road Furniture (Section 1)	8 days	0 days	8 days	0%	Fri 28/1/22	Wed 9/2/22	NA	NA	Mon 14/2/22	Tue 22/2/22	11 days 2 day	956,358,957	$\  \  \ $					<del> </del>				
960	Part 1 - CH1386 to CH1394 South Abutment	352 days	0 days	352 days	0%	Fri 3/7/20	Sat 4/9/21	NA	NA	Sat 25/7/20	Thu 16/9/21	10 days		1			++++						
961	Bored Pile (A02-BP2) @ CH1386 by Rig 1	42 days	0 days	42 days	0%	Fri 3/7/20	Thu 20/8/20	NA	NA	Sat 25/7/20	Fri 11/9/20	19 days 3 days	831FS+12 days		╸╂╫╽║								
962	Bored Pile (A02-BP1) @ CH1386 by Rig 1	63 days	0 days	63 days	0%	Tue 28/7/20	Sat 10/10/20	NA	NA	Wed 19/8/20	Tue 3/11/20	19 days 3 days	202FF,961FF+4										
963	Pile Testing	35 days	0 days	35 days	0%	Mon 12/10/20	Sat 21/11/20	NA	NA	Wed 4/11/20	Mon 14/12/20	19 days 4 days	962										
	Tools	Summary			Inactive Mil	lestone $\diamondsuit$		Duration-or	alv. "		Start-only	Е	P.	emal Milesto	ne 🔷		O20	ical Split				111111	—
	Prog with Progress Task Split	Project Sun	nmary		Inactive Mil				nmary Rollup 🛭		Start-only Finish-only	]		emai Milesto adline				gress					
as of 22-May	y-20 Milestone ♦	Inactive Ta			Manual Tas			Manual Sui			External Tasl			tical				nual Progress	s •				

Task Na  Tas	Proof-drilling Works  South Abutment  South Abutment ELS- Design and Method Statement Submission  South Abutment ELS - Design and Method Statement Comment & Appraoval  Drive sheetpile (~900m) Prod. Rate: 10m/d/team  Excavation ~1,344m3 & lateral support. Prod. Rate: 160m3/day/team  Blinding layer  South Abutment Formwork - Design and Method Statement Submission  South Abutment Formwork - Design and Method Statement Comment & Appraoval  Base Slab  Wall (3.85m thk). Prod. Rate: 18d/bay/team  Wall (0.5m thk)  Install bridge bearing  South Approach Ramp - CH1394-1444.7 - Total 8 bays (4 bay/side)  South Approach Ramp ELS - Temp. Works Design and Method Statement Submission  South Approach Ramp ELS - Temp. Works Design and Method Statement	11 days 166 days 0 days 30 days 11 days 11 days	o days	Remaining Duration 11 days 166 days 0 days 30 days 11 days 1 day 0 days 30 days	Physical % Complete 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0%	Early Start  Mon 23/11/20  Wed 3/2/21  Mon 4/1/21  Mon 4/1/21  Wed 3/2/21  Fri 19/2/21  Thu 4/3/21  Mon 21/12/20	Fri 4/12/20 Thu 26/8/21 Mon 4/1/21 Tue 2/2/21 Thu 18/2/21 Wed 3/3/21 Thu 4/3/21	NA NA NA	NA NA NA NA NA NA NA NA	Tue 2/2/21 Thu 18/2/21 Tue 19/1/21 Tue 19/1/21 Thu 18/2/21	Late Finish  Wed 17/2/21  Tue 7/9/21  Tue 19/1/21  Wed 17/2/21	Total   TR   Slack   58 days   2 d   10 days   15 days   1 d   15 days   1 d	963 968SS,964 Q	2020 12   Q3	Q4 Q1	2021 Q2 Q3	Q4 Q1	2022 Q2   Q3   Q4
065	South Abutment ELS- Design and Method Statement Submission  South Abutment ELS - Design and Method Statement Comment & Appraoval  Drive sheetpile (~900m) Prod. Rate: 10m/d/team  Excavation ~1,344m3 & lateral support. Prod. Rate: 160m3/day/team  Blinding layer  South Abutment Formwork - Design and Method Statement Submission  South Abutment Formwork - Design and Method Statement Comment & Appraoval  Base Slab  Wall (3.85m thk). Prod. Rate: 18d/bay/team  Wall (0.5m thk)  Install bridge bearing  South Approach Ramp - CH1394-1444.7 - Total 8 bays (4 bay/side)  South Approach Ramp ELS - Temp. Works Design and Method Statement Submission  South Approach Ramp ELS - Temp. Works Design and Method Statement	166 days 0 days 30 days 11 days 11 days 0 days 30 days 30 days 30 days 36 days 39 days 52 days	0 days	11 days 166 days 0 days 30 days 11 days 11 days 1 day 0 days	0% 0% 0% 0% 0% 0% 0% 0% 0%	Wed 3/2/21 Mon 4/1/21 Mon 4/1/21 Wed 3/2/21 Fri 19/2/21 Thu 4/3/21	Thu 26/8/21 Mon 4/1/21 Tue 2/2/21 Thu 18/2/21 Wed 3/3/21 Thu 4/3/21	NA NA NA NA NA	NA NA NA	Thu 18/2/21 Tue 19/1/21 Tue 19/1/21	Tue 7/9/21 Tue 19/1/21 Wed 17/2/21	58 days 2 d 10 days 15 days 1 d	963 968SS,964	- 4	<b>4</b> 4/1	¥2   V)	XT VI	
066	South Abutment ELS - Design and Method Statement Submission  South Abutment ELS - Design and Method Statement Comment & Appraoval  Drive sheetpile (~900m) Prod. Rate: 10m/d/team  Excavation ~1,344m3 & lateral support. Prod. Rate: 160m3/day/team  Blinding layer  South Abutment Formwork - Design and Method Statement Submission  South Abutment Formwork - Design and Method Statement Comment & Appraoval  Base Slab  Wall (3.85m thk). Prod. Rate: 18d/bay/team  Wall (0.5m thk)  Install bridge bearing  South Approach Ramp - CH1394-1444.7 - Total 8 bays (4 bay/side)  South Approach Ramp ELS - Temp. Works Design and Method Statement Submission  South Approach Ramp ELS - Temp. Works Design and Method Statement	0 days 30 days 11 days 11 days 1 day 0 days 30 days 36 days 36 days 52 days 8 days	0 days	0 days 30 days 11 days 11 days 1 day 0 days 30 days	0% 0% 0% 0% 0%	Mon 4/1/21 Mon 4/1/21 Wed 3/2/21 Fri 19/2/21 Thu 4/3/21	Mon 4/1/21 Tue 2/2/21 Thu 18/2/21 Wed 3/3/21 Thu 4/3/21	NA NA NA	NA NA NA	Tue 19/1/21 Tue 19/1/21	Tue 19/1/21 Wed 17/2/21	15 days 1 d	ay		<b>-&gt;</b> Y			
067 068 069 070 071 071 072 073 074 077 077 077 077 078 079 080 081 082 083 084	South Abutment ELS - Design and Method Statement Comment & Appraoval  Drive sheetpile (~900m) Prod. Rate: 10m/d/team  Excavation ~1,344m3 & lateral support. Prod. Rate: 160m3/day/team  Blinding layer  South Abutment Formwork - Design and Method Statement Submission  South Abutment Formwork - Design and Method Statement Comment & Appraoval  Base Slab  Wall (3.85m thk). Prod. Rate: 18d/bay/team  Wall (0.5m thk)  Install bridge bearing  South Approach Ramp - CH1394-1444.7 - Total 8 bays (4 bay/side)  South Approach Ramp ELS - Temp. Works Design and Method Statement Submission  South Approach Ramp ELS - Temp. Works Design and Method Statement	30 days 11 days 11 days 1 day 0 days 30 days 36 days 39 days 52 days	0 days	30 days 11 days 11 days 1 days 0 days 30 days	0% 0% 0% 0%	Mon 4/1/21 Wed 3/2/21 Fri 19/2/21 Thu 4/3/21	Tue 2/2/21 Thu 18/2/21 Wed 3/3/21 Thu 4/3/21	NA NA NA	NA NA	Tue 19/1/21	Wed 17/2/21				<b>♦</b> 4/1			
068 069 0770 0771 0772 0773 0774 0775 0776 0777 0778 0779 080 081 082 083 084	Drive sheetpile (~900m) Prod. Rate: 10m/d/team  Excavation ~1,344m3 & lateral support. Prod. Rate: 160m3/day/team  Blinding layer  South Abutment Formwork- Design and Method Statement Submission  South Abutment Formwork - Design and Method Statement Comment & Appraoval  Base Slab  Wall (3.85m thk). Prod. Rate: 18d/bay/team  Wall (0.5m thk)  Install bridge bearing  South Approach Ramp - CH1394-1444.7 - Total 8 bays (4 bay/side)  South Approach Ramp ELS - Temp. Works Design and Method Statement Submission  South Approach Ramp ELS - Temp. Works Design and Method Statement	11 days 11 days 1 day 0 days 30 days 36 days 39 days 52 days 8 days	0 days	11 days 11 days 1 day 0 days 30 days	0% 0% 0%	Wed 3/2/21 Fri 19/2/21 Thu 4/3/21	Thu 18/2/21 Wed 3/3/21 Thu 4/3/21	NA NA	NA			15 days 1 d	ay 966	<b>     </b>				
069 070 071 072 073 074 075 076 077 078 079 080 081 082 083 084	Excavation ~1,344m3 & lateral support. Prod. Rate: 160m3/day/team  Blinding layer  South Abutment Formwork - Design and Method Statement Submission  South Abutment Formwork - Design and Method Statement Comment & Appraoval  Base Slab  Wall (3.85m thk). Prod. Rate: 18d/bay/team  Wall (0.5m thk)  Install bridge bearing  South Approach Ramp - CH1394-1444.7 - Total 8 bays (4 bay/side)  South Approach Ramp ELS - Temp. Works Design and Method Statement Submission  South Approach Ramp ELS - Temp. Works Design and Method Statement	11 days 1 day 0 days 30 days 36 days 39 days 52 days 8 days	0 days 0 days 0 days 0 days 0 days 0 days	11 days 1 day 0 days 30 days	0% 0% 0%	Fri 19/2/21 Thu 4/3/21	Wed 3/3/21 Thu 4/3/21	NA		Thu 18/2/21	TD 0/0/01							
7770 7771 7772 7773 7774 7775 7776 7777 7778 7779 7880 7880 7881 7882 7883 7884 7885	Excavation ~1,344m3 & lateral support. Prod. Rate: 160m3/day/team  Blinding layer  South Abutment Formwork - Design and Method Statement Submission  South Abutment Formwork - Design and Method Statement Comment & Appraoval  Base Slab  Wall (3.85m thk). Prod. Rate: 18d/bay/team  Wall (0.5m thk)  Install bridge bearing  South Approach Ramp - CH1394-1444.7 - Total 8 bays (4 bay/side)  South Approach Ramp ELS - Temp. Works Design and Method Statement Submission  South Approach Ramp ELS - Temp. Works Design and Method Statement	11 days 1 day 0 days 30 days 36 days 39 days 52 days 8 days	0 days 0 days 0 days 0 days 0 days 0 days	11 days 1 day 0 days 30 days	0%	Fri 19/2/21 Thu 4/3/21	Wed 3/3/21 Thu 4/3/21	NA	NA		Tue 2/3/21	10 days 2 d	ays 964,967,980					
7770 7771 7772 7773 7774 7775 7776 7777 7778 7779 7880 7880 7881 7882 7883 7884 7885	Blinding layer  South Abutment Formwork - Design and Method Statement Submission  South Abutment Formwork - Design and Method Statement Comment & Appraoval  Base Slab  Wall (3.85m thk). Prod. Rate: 18d/bay/team  Wall (0.5m thk)  Install bridge bearing  South Approach Ramp - CH1394-1444.7 - Total 8 bays (4 bay/side)  South Approach Ramp ELS - Temp. Works Design and Method Statement Submission  South Approach Ramp ELS - Temp. Works Design and Method Statement	1 day 0 days 30 days 36 days 39 days 52 days	0 days 0 days 0 days 0 days 0 days	1 day 0 days 30 days	0%	Thu 4/3/21	Thu 4/3/21			Mon 22/3/21	Tue 6/4/21	26 days 2 d						
9771 9772 9773 9774 9775 9776 9777 9778 9779 9880 9881 9882 9883 9884 9885	South Abutment Formwork - Design and Method Statement Submission  South Abutment Formwork - Design and Method Statement Comment & Appraoval  Base Slab  Wall (3.85m thk). Prod. Rate: 18d/bay/team  Wall (0.5m thk)  Install bridge bearing  South Approach Ramp - CH1394-1444.7 - Total 8 bays (4 bay/side)  South Approach Ramp ELS - Temp. Works Design and Method Statement Submission  South Approach Ramp ELS - Temp. Works Design and Method Statement	0 days 30 days 36 days 39 days 52 days 8 days	0 days 0 days 0 days 0 days	0 days 30 days	0%				NA	Wed 7/4/21	Wed 7/4/21	26 days 0 d						
7772 7773 7774 7775 7776 7777 7778 7779 778 779 7880 7881 7882 7883 7884 7885	South Abutment Formwork - Design and Method Statement Comment & Appraoval Base Slab Wall (3.85m thk). Prod. Rate: 18d/bay/team Wall (0.5m thk) Install bridge bearing South Approach Ramp - CH1394-1444.7 - Total 8 bays (4 bay/side) South Approach Ramp ELS - Temp. Works Design and Method Statement Submission South Approach Ramp ELS - Temp. Works Design and Method Statement	30 days 36 days 39 days 52 days 8 days	0 days 0 days 0 days	30 days		MOR 21/12/20												
9773 9774 9775 9776 9777 9778 9779 9880 9881 9882 9883 9884	Appraoval Base Slab  Wall (3.85m thk). Prod. Rate: 18d/bay/team  Wall (0.5m thk)  Install bridge bearing  South Approach Ramp - CH1394-1444.7 - Total 8 bays (4 bay/side)  South Approach Ramp ELS - Temp. Works Design and Method Statement Submission  South Approach Ramp ELS - Temp. Works Design and Method Statement	36 days 39 days 52 days 8 days	0 days		0%				NA	Tue 9/3/21	Tue 9/3/21	78 days 1 d			1 121/12			
9774 9775 9776 9777 9778 9779 980 981 982 983 984 985	Wall (3.85m thk). Prod. Rate: 18d/bay/team  Wall (0.5m thk)  Install bridge bearing  South Approach Ramp - CH1394-1444.7 - Total 8 bays (4 bay/side)  South Approach Ramp ELS - Temp. Works Design and Method Statement Submission  South Approach Ramp ELS - Temp. Works Design and Method Statement	39 days 52 days 8 days	0 days	36 days		Mon 21/12/20			NA	Tue 9/3/21	Wed 7/4/21	78 days 1 d						
775 776 777 778 779 880 881 882 883 884	Wall (0.5m thk)  Install bridge bearing  South Approach Ramp - CH1394-1444.7 - Total 8 bays (4 bay/side)  South Approach Ramp ELS - Temp. Works Design and Method Statement Submission  South Approach Ramp ELS - Temp. Works Design and Method Statement	52 days 8 days			0%	Wed 17/3/21	Fri 30/4/21	NA	NA	Thu 8/4/21	Fri 21/5/21	16 days 2 d	ays 970,972,986					
976 977 978 979 980 981 982 983 984	Install bridge bearing  South Approach Ramp - CH1394-1444.7 - Total 8 bays (4 bay/side)  South Approach Ramp ELS - Temp. Works Design and Method Statement Submission  South Approach Ramp ELS - Temp. Works Design and Method Statement	8 days	0 days	39 days	0%	Mon 3/5/21	Fri 18/6/21	NA	NA	Sat 22/5/21	Thu 8/7/21	16 days 3 d	nys 973					
777 778 779 880 881 882 883 884	South Approach Ramp - CH1394-1444.7 - Total 8 bays (4 bay/side)  South Approach Ramp ELS - Temp. Works Design and Method Statement Submission  South Approach Ramp ELS - Temp. Works Design and Method Statement			52 days	0%	Sat 19/6/21	Thu 19/8/21	NA	NA	Fri 9/7/21	Tue 7/9/21	16 days 2 d	ays 974					
9778 9779 980 981 982 983 984	South Approach Ramp ELS - Temp. Works Design and Method Statement Submission  South Approach Ramp ELS - Temp. Works Design and Method Statement	259 days	0 days	8 days	0%	Fri 27/8/21	Sat 4/9/21	NA	NA	Wed 8/9/21	Thu 16/9/21	10 days 1 d	975,736,822,965					
9779 980 981 982 983 984	Submission South Approach Ramp ELS - Temp. Works Design and Method Statement		s 0 days	259 days	0%	Mon 21/9/20	Fri 6/8/21	NA	NA	Sun 15/11/20	Sat 4/12/21	45 days				┵┵╫╫╫╢┃		
980 981 982 983 984	South Approach Ramp ELS - Temp. Works Design and Method Statement	0 days	0 days	0 days	0%	Mon 21/9/20	Mon 21/9/20	NA	NA	Sun 15/11/20	Sun 15/11/20	55 days 1 d	ay		1/9			
980 981 982 983 984		30 days	0 days	30 days	0%	Mon 21/9/20	Tue 20/10/20	) NA	NA	Sun 15/11/20	Mon 14/12/20	55 days 1 d	ау 978					
981 982 983 984	Drive sheetpile (~240m) Prod. Rate: 10m/d/team	26 days		26 days	0%	Mon 23/11/20			NA	Tue 15/12/20	Sat 16/1/21	19 days 2 d						
182 183 184 185	Excavation ~2,688m3 & lateral support. Prod. Rate: 160m3/day/team				0%	Wed 23/12/20				Mon 18/1/21	Mon 8/2/21				T <u>1</u>			
83 84 85		19 days		19 days					NA			19 days 2 d						
84	Rock Replacement	7 days		7 days	0%	Sun 17/1/21	Sat 23/1/21		NA	Tue 9/2/21	Mon 15/2/21	23 days 1 d						
85	Blinding layer. Prod. Rate: 2bays/day	1 day	0 days	1 day	0%	Mon 25/1/21	Mon 25/1/21	NA	NA	Tue 16/2/21	Tue 16/2/21	16 days 1 d	981,982					
	Sourth Approach - Formworks Design and Method Statement Submission	0 days	0 days	0 days	0%	Tue 1/12/20	Tue 1/12/20	NA	NA	Mon 18/1/21	Mon 18/1/21	48 days 1 d	ay		♠ 1/12			
986	South Approach Ramp Formworks Design and Method Statement Comment & Appraoval	30 days	0 days	30 days	0%	Tue 1/12/20	Wed 30/12/2	0 NA	NA	Mon 18/1/21	Tue 16/2/21	48 days 1 d	ay 984					
	6 x Base Slab Prod. Rate: 12d/bay/team x 2 teams	40 days	0 days	40 days	0%	Tue 26/1/21	Tue 16/3/21	NA	NA	Wed 17/2/21	Wed 7/4/21	16 days 4 d	ays 983,985,244					
87	6 x Wall. Prod. Rate: 12d/bay/team x 3 level x 2 teams	78 days	0 days	78 days	0%	Wed 17/3/21	Tue 22/6/21	NA	NA	Mon 28/6/21	Tue 28/9/21	82 days 6 d	ays 986					
8	Backfilling ~4,765.89m3 within approach ramp to formation level (160m3/day) +12d shoring removal x 2 (considered time for SRT)	38 days	0 days	38 days	0%	Wed 23/6/21	Fri 6/8/21	NA	NA	Fri 22/10/21	Sat 4/12/21	100 days 2 d	ays 987					
39	CH1386-1444: South Approach Ramp (50m): Parapet, Central Median & Furniture	43 days	0 days	43 days	0%	Wed 15/12/21	Wed 9/2/22	NA	NA	Wed 15/12/21	Wed 9/2/22	0 days	988				<b>                                      </b>	
90		23 days		23 days	0%	Wed 15/12/21	Thu 13/1/22	NA	NA	Wed 15/12/21	Thu 13/1/22	0 days 2 d	ays 253,956					
91	team CH1386-1444: Parapet (10m per day per team) x 2 team + 2 team x 6 day	13 days		13 days	0%	Fri 14/1/22	Fri 28/1/22		NA	Fri 14/1/22	Fri 28/1/22	0 days 2 d						
92	concreting	7 days		7 days	0%	Sat 29/1/22	Wed 9/2/22		NA	Sat 29/1/22	Wed 9/2/22	0 days 1 d					<b></b>	
												-						
93	CH1087 - 1444: Bitumen Paving and Lighting	60 days		60 days	0%	Thu 30/12/21			NA	Wed 15/12/21	Tue 1/3/22	-11 days 1 d	813,884,892FF,9					
94		1 day?		1 day?	0%		Thu 16/5/19		NA	Wed 29/5/24	Wed 29/5/24	1840 d						
995 (	CH1087-1311 (224m): Utility Laying (by Others) (Agreed)	63 days	0 days	63 days	0%	Wed 29/12/21	Tue 1/3/22	NA	NA	Wed 29/12/21	Tue 1/3/22	0 days					/	
996	CLP (132kV)	63 days	0 days	63 days	0%	Wed 29/12/21	Tue 1/3/22	NA	NA	Wed 29/12/21	Tue 1/3/22	0 days 1 d	ay 899,955SS+32 d				<b></b>	
97	CLP (11kV)	63 days	0 days	63 days	0%	Wed 29/12/21	Tue 1/3/22	NA	NA	Wed 29/12/21	Tue 1/3/22	0 days 1 d	996SS				<b>********</b>	
98	HKCG	53 days	0 days	53 days	0%	Wed 29/12/21	Sat 19/2/22	NA	NA	Sat 8/1/22	Tue 1/3/22	10 days 1 d	997SS				<b>&gt;</b>	
99	CATV	23 days	0 days	23 days	0%	Wed 29/12/21	Thu 20/1/22	NA	NA	Thu 3/2/22	Fri 25/2/22	36 days 1 d	998SS				<b>**</b>	
000	Towngas telecom	27 days	0 days	27 days	0%	Wed 29/12/21	Mon 24/1/22	NA	NA	Thu 3/2/22	Tue 1/3/22	36 days 1 d	999SS				<b>/</b>	
001	PCCW-HKT	23 days		23 days	0%	Wed 29/12/21			NA	Sun 6/2/22	Mon 28/2/22	39 days 1 d					<b>/</b>	
002	Fresh and Salt Watermains (by POC)	24 days		24 days	0%	Wed 29/12/21			NA	Sun 6/2/22	Tue 1/3/22	39 days 1 d						
													100100					
	CH1311-1396 (85m): Utility Laying (by Others) (Agreed)	84 days		84 days	0%	Thu 7/10/21	Wed 29/12/2		NA	Fri 4/2/22	Tue 1/3/22	62 days	005 2					
004	CLP (11kV)	26 days		26 days	0%	Wed 5/1/22	Sun 30/1/22		NA	Fri 4/2/22	Tue 1/3/22	30 days 1 d						
005	PCCW-HKT	18 days		18 days	0%	Wed 5/1/22	Sat 22/1/22		NA	Sat 12/2/22	Tue 1/3/22	38 days 1 d	1004SS					
006	Sat and Fresh Watermain (by POC)	18 days	0 days	18 days	0%	Wed 5/1/22	Sat 22/1/22	NA	NA	Sat 12/2/22	Tue 1/3/22	38 days 1 d	ay 1005SS				<b>             </b>	
007	Underpass and Depressed Road	619 days	s 142.15 days	476.85 days	0%	Tue 3/9/19	Mon 4/10/21	Tue 3/9/19	NA	Tue 3/9/19	Tue 1/3/22	120 days						
tle: Rev.11 F	Prog with Progress Task	Summary			Inactive M	filestone $\diamondsuit$		Duration-or	nly		Start-only	Е	External	Milestone	<b>♦</b>		Critical Split	
s of 22-May	Split	Project Sur	nmary		Inactive St	immary					-	3	Deadline		T			

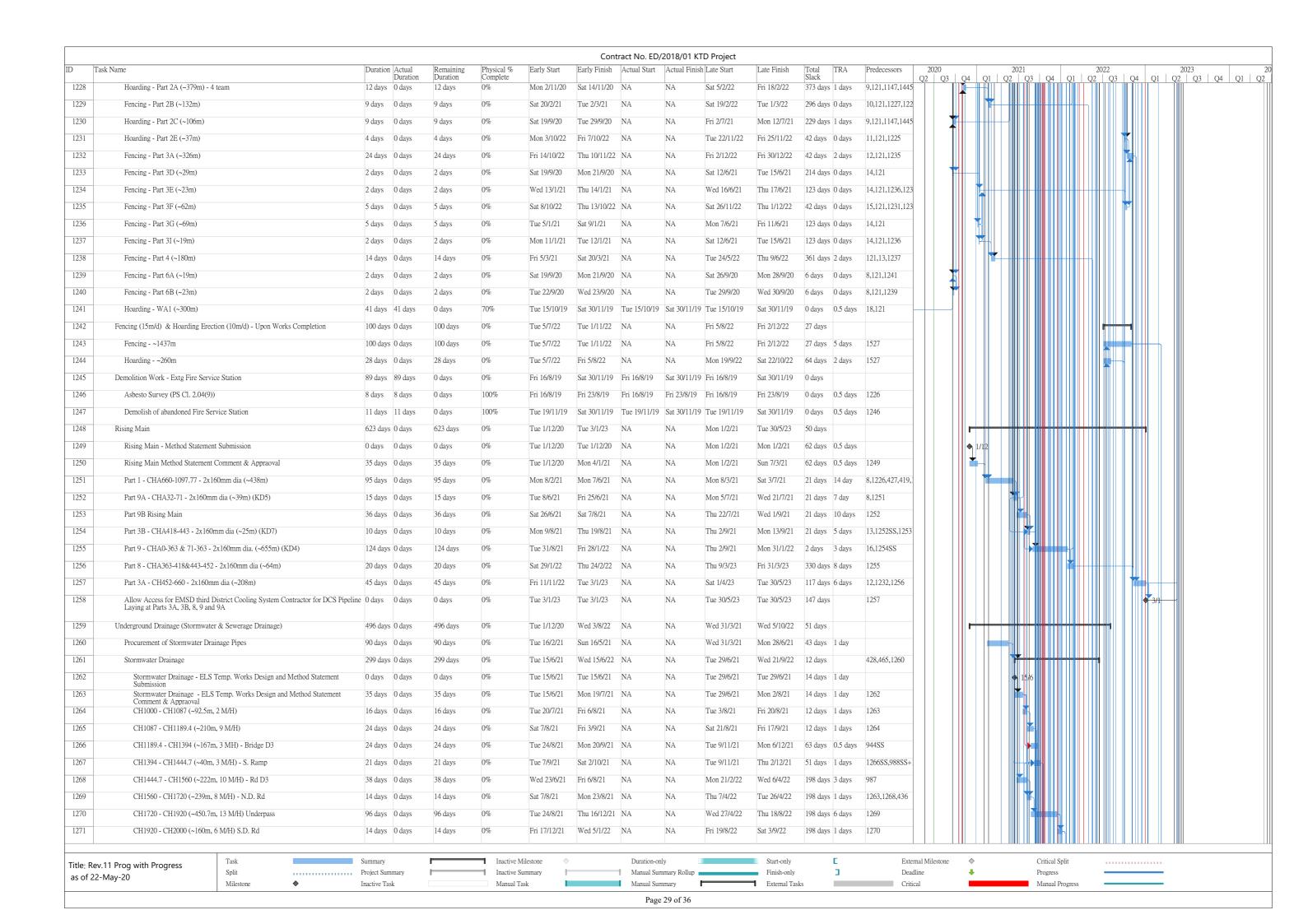
		_	T	-					/2018/01 KT															
Task N	fame	Duration	Actual Duration	Remaining Duration	Physical % Complete	Early Start	Early Finish	Actual Start	Actual Finish	Late Start	Late Finish	Total Slack		Predecessors	2020 Q2   Q3	Q4	Q1	2021 Q2   Q	23   0	Q4 O1	2 1   Q2	2022 2   Q3	3   0	24 (
)8	North Depressed Rd (CH1560-1720)	562 days	211.42 days	350.58 days	0%	Tue 3/9/19	Tue 27/7/21	Tue 3/9/19	NA	Tue 3/9/19	Tue 1/3/22	177 days	3											
)9	Ground Monitoring Works	17 days	17 days	0 days	100%	Tue 3/9/19	Thu 19/9/19	Tue 3/9/19	Thu 19/9/19	Tue 3/9/19	Thu 19/9/19	0 days	2 days											
.0	Mobilization	7 days	7 days	0 days	100%	Fri 1/11/19	Fri 8/11/19	Fri 1/11/19	Fri 8/11/19	Fri 1/11/19	Fri 8/11/19	0 days	0 days											
1	Complete the Diveration of Existing Overhang Cable along the North Depressed	1 day	1 day	0 days	100%	Sat 26/10/19	Sat 26/10/19	Sat 26/10/19	Sat 26/10/19	Sat 26/10/19	Sat 26/10/19	0 days	0.5 days											
2	Drive Sheet Pile (380m, 15,000m penetration depth) Prod. Rate by 2 teams	39 days	39 days	0 days	100%	Fri 22/11/19	Thu 9/1/20	Fri 22/11/19	Thu 9/1/20	Fri 22/11/19	Thu 9/1/20	0 days	0.5 days	1009,1010,1011										
	(around 125m penetration depth per day per team)																							
.3	Pumping Test	120 days	75 days	45 days	0%	Thu 20/2/20	Fri 17/7/20	Thu 20/2/20	NA	Thu 20/2/20	Sat 18/7/20	1 day	0.5 days	1012										
.4	CH1560 - CH1720 North Depress Road	449 days	98.66 days	350.34 days	0%	Mon 20/1/20	Tue 27/7/21	Mon 20/1/20	NA	Mon 20/1/20	Tue 1/3/22	177 days	3											
.5	Excavation with Shoring Installation - Prod Rate: 270m3/d/team. (~36.611m3). 1 team	145 days	98 days	47 days	0%	Mon 20/1/20	Sat 18/7/20	Mon 20/1/20	NA	Mon 20/1/20	Sat 18/7/20	-11 days	1 day	1012										
.6	CNCE No. 73 - April 2020 Inclement Weather	8 days	0 days	8 days	0%	Mon 20/7/20	Tue 28/7/20	NA	NA	Tue 7/7/20	Wed 15/7/20	-11 days		1015,73										
7	May 2020 - Inclement Weather	3 days	0 days	3 days	0%	Wed 29/7/20	Fri 31/7/20	NA	NA	Thu 16/7/20	Sat 18/7/20	-11 days		1016,74										
.8	Rock Fill Replacement (Final Level)	6 days	0 days	6 days	0%	Sat 1/8/20	Fri 7/8/20	NA	NA	Mon 20/7/20	Sat 25/7/20	-11 days		1013,1015,1017	#									
.9	6 Bay Base Slabs + 3 Levels Wall Both Sides	55 days		55 days	0%	Wed 3/6/20		NA	NA	Thu 21/5/20	Sat 25/7/20	-11 days		1015SS+107 day										
20	Base Slab and Wall Below 4th Level Shoring	25 days		25 days	0%	Sat 8/8/20		NA	NA	Mon 27/7/20	Mon 24/8/20			1019,1015,1018										
21	Backfilling and 4th Level Shoring Removal	18 days		18 days	0%	Mon 7/9/20	Sat 26/9/20		NA	Tue 25/8/20	Mon 14/9/20	-11 days		1020										
22	Wall Construction (between 3rd and 4th levels shoring) and Remaining Base Slab			24 days	0%	Mon 28/9/20	Wed 28/10/20		NA	Tue 15/9/20	Wed 14/10/20			1021										
23	Backfilling and 3rd Level Shoring Removal	18 days	0 days	18 days	0%	Thu 29/10/20	Wed 18/11/20	NA	NA	Thu 15/10/20	Thu 5/11/20	-11 days		1022										
24	Structure Works Below 2nd & 3rd Levels Shoring	23 days	0 days	23 days	0%	Thu 19/11/20	Tue 15/12/20	NA	NA	Fri 6/11/20	Wed 2/12/20	-11 days		1023										
25	Backfilling and 2nd Level Shoring Removal	18 days	0 days	18 days	0%	Wed 16/12/20	Fri 8/1/21	NA	NA	Thu 3/12/20	Wed 23/12/20	-11 days		1024										
26	Remaining Wall Construction	30 days	0 days	30 days	0%	Sat 9/1/21	Tue 16/2/21	NA	NA	Thu 24/12/20	Sat 30/1/21	-11 days		1025										
7	Backfill & extract sheet pile (CH1560 to CH1720)	26 days	0 days	26 days	0%	Wed 17/2/21	Thu 18/3/21	NA	NA	Mon 1/2/21	Fri 5/3/21	-11 days	1 day	1026			<b>I</b>							
8	Emergency walkway & median barrier installation	20 days	0 days	20 days	0%	Tue 1/6/21	Thu 24/6/21	NA	NA	Mon 3/1/22	Tue 25/1/22	177 days	2 days	1027				<b>4</b>						
29	Parapet installation	27 days	0 days	27 days	0%	Fri 25/6/21	Tue 27/7/21	NA	NA	Wed 26/1/22	Tue 1/3/22	177 days	3 days	1028				<b>.</b>						
0	CH1720 - CH1850 (130m long) (2 x teams)	477 days	0 days	477 days	0%	Mon 15/6/20	Mon 4/10/21	NA	NA	Mon 15/6/20	Mon 4/10/21	0 days			<sub> </sub>				_					
1	Drive sheet pile (approx. 17000m penetration depth, 380m/day)	46 days		46 days	0%	Mon 15/6/20	Sat 8/8/20	NA	NA	Mon 15/6/20	Sat 8/8/20	0 days	2 day											
2	Pumping Test	22 days		22 days	0%	Mon 10/8/20	Thu 3/9/20		NA	Mon 10/8/20	Thu 3/9/20	0 days		1031,1045										
														1032										
3	CH1720 - CH1850 (130m long) (2 x teams) Top Portion: Excavation with Shoring Installation = 23,000 cu.m. (320m3/d/team x 2)	42 days	0 days	42 days	0%	FII 4/9/20	Sat 24/10/20	NA	NA	Fri 4/9/20	Sat 24/10/20	0 days	2 day	1032										
4	CH1720 - CH1850 (130m long) (2 x teams) Bottom Portion: Excavation with	52 days	0 days	52 days	0%	Tue 27/10/20	Mon 28/12/20	NA	NA	Tue 27/10/20	Mon 28/12/20	0 days	1 day	1033										
	Shoring Installation = 23,876 cu.m. (250m3/d/team x 2)																							
35	Rock fill - Prod. Rate: (3,469m3) (160m3/d/team. 2 team)	6 days	0 days	6 days	0%	Tue 29/12/20	Tue 5/1/21	NA	NA	Tue 29/12/20	Tue 5/1/21	0 days	1 day	1033,1034										
36	Base Slab - 8 bays. Prod. Rate: 12d/team/bay include pipe laying. 4 teams	26 days	0 days	26 days	0%	Wed 3/3/21	Thu 1/4/21	NA	NA	Wed 3/3/21	Thu 1/4/21	0 days	2 day	1035,1042,262										
37	Wall - 8 bays. Prod. Rate: 3 level of shoring 12d/bay/level/team. 4 teams	75 days	0 days	75 days	0%	Tue 6/4/21	Tue 6/7/21	NA	NA	Tue 6/4/21	Tue 6/7/21	0 days	3 days	1036										
38	Top Slab - 8 bays. Prod. Rate: 18d/team/bay, 4 teams	38 days	0 days	38 days	0%	Wed 7/7/21	Thu 19/8/21	NA	NA	Wed 7/7/21	Thu 19/8/21	0 days	2 day	1037				1	<b>-</b>					
19	Falsework Removal	37 days	0 days	37 days	0%	Fri 20/8/21	Mon 4/10/21	NA	NA	Fri 20/8/21	Mon 4/10/21	0 days	2 day	1038										
10	Sheetpile Extraction and Backfill	13 days	0 days	13 days	0%	Fri 20/8/21	Fri 3/9/21	NA	NA	Fri 17/9/21	Mon 4/10/21	24 days	1 day	1038										
1	Underground Plant Room next to Underpass	45 days		45 days	0%	Wed 6/1/21	Tue 2/3/21	NA	NA	Wed 6/1/21	Tue 2/3/21	0 days												
12	Underground pump house structure	45 days		45 days	0%	Wed 6/1/21		NA	NA	Wed 6/1/21	Tue 2/3/21	1	3 day	714,1035,262,28										
	Underpass & South Depressed Road CH1850-1950 - (100m long) 8 bays x 13.5m long			54.64 days	0%	Wed 26/2/20		Wed 26/2/20		Wed 26/2/20	Sat 8/8/20	14 days		,1033,202,20										
14	Drive sheet pile (12,530m embedded length sheetpile) Prod. Rate 380m/team/day	32 days		0 days	100%	Wed 26/2/20	Mon 6/4/20	Wed 26/2/20		Wed 26/2/20	Mon 6/4/20	0 days												
15	Pumping Test	80 days	29 days	51 days	36%	Fri 17/4/20		Fri 17/4/20		Fri 17/4/20	Sat 8/8/20			1044										
6	Underpass & South Depress Road (CH1850 to CH1950)	539 days	27.64 days	511.36 days	0%	Thu 23/4/20	Wed 13/10/21	Thu 23/4/20	NA	Thu 23/4/20	Tue 1/3/22	139 days	3											
7	Excavation with Shoring Installation (Upper Portion) - Prod. Rate: 270m3/d/team. 1 team 16,000m3)	80 days	24 days	56 days	23%	Thu 23/4/20	Thu 30/7/20	Thu 23/4/20	NA	Thu 23/4/20	Fri 4/9/20	31 days	5 days	1045SS+6 days		$\mathbb{H} \  \ $								
18	Excavation with Shoring Installation (Lower Portion) - Prod. Rate: 270m3/d/team. 1 team 16.000m3)	65 days	0 days	65 days	0%	Fri 31/7/20	Fri 16/10/20	NA	NA	Sat 5/9/20	Mon 23/11/20	31 days	5 day	1047,1045FF+12 days	📥									
19	Rock fill - Prod. Rate: 160m3/d/team (1,745m3)	7 days	0 days	7 days	0%	Sat 17/10/20	Sat 24/10/20	NA	NA	Tue 24/11/20	Tue 1/12/20	31 days	1 day	1047,1048			$\parallel \parallel \parallel$							
50	Blinding	1 day	0 days	1 day	0%	Tue 27/10/20	Tue 27/10/20	NA	NA	Wed 2/12/20	Wed 2/12/20	31 days	0.5 days	1049										
											<u> </u>													Ш <u>Н</u>
e: Rev.11	Prog with Progress	Summary			Inactive M	ilestone $\Diamond$		Duration-on	-		Start-only		С		mal Milestone	$\Diamond$				ical Split				
	y-20 Split	Project Sun	nmary		Inactive Su	ımmary 📗		Manual Sur	nmary Rollup 🛚		Finish-only		3	Dead	lline	•			Prog	gress			_	_

Tasl	AT.	ъ .	TA . •	D	DI	P 1 2				KTD Project	T . P	m , 1 m- :	D 1	020			2022		2022
Tasl	k Name	Duration	Actual Duration	Remaining Duration	Physical % Complete	Early Start	Early Finish	Actual Start	Actual Fin	ish Late Start	Late Finish	Total TRA Slack		020   Q3   Q4	Q1   Q2	Q3   Q4   Q1	2022   Q2   Q3   Q	Q4 Q1 (	2023 Q2   Q3
051	Underpass Formworks Design and Method Statement Submission	0 days	0 days	0 days	0%	Mon 14/9/20	Mon 14/9/20	NA	NA	Tue 3/11/20	Tue 3/11/20	50 days 1 day		<b>4</b> 14/9					
052	Underpass Formworks Design and Method Statement Comment & Appraoval	30 days	0 days	30 days	0%	Mon 14/9/20	Tue 13/10/20	NA	NA	Tue 3/11/20	Wed 2/12/20	50 days 1 day	1051						
.053	Casting base slab (12d/bay/team x 3) (6 bays)	26 days	0 days	26 days	0%	Wed 28/10/20	Thu 26/11/20	NA	NA	Thu 3/12/20	Tue 5/1/21	31 days 2 day	1050,1052,262						
1054	Waterproofing & Bacfilling before S3 Shoring Removal	12 days	0 days	12 days	0%	Fri 27/11/20	Thu 10/12/20	NA	NA	Wed 6/1/21	Tue 19/1/21	31 days 1 day	1053						
1055	S3 Shoring ELS Removal + North/South End Re-propping	7 days	0 days	7 days	0%	Fri 11/12/20	Fri 18/12/20	NA	NA	Wed 20/1/21	Wed 27/1/21	31 days 1 day	1054						
1056	Wall Construction up to soffit of S2 Shoring (12d/bay/team x 3) (6 bays)	24 days	0 days	24 days	0%	Sat 19/12/20	Tue 19/1/21	NA	NA	Thu 28/1/21	Sat 27/2/21	31 days 2 day	1055		Ь				
1057	Waterproofing & Bacfilling before S2 Shoring Removal	12 days	0 days	12 days	0%	Wed 20/1/21	Tue 2/2/21	NA	NA	Mon 1/3/21	Sat 13/3/21	31 days 1 day	1056						
058	S2 Shoring ELS Removal + North/South End Re-propping	7 days	0 days	7 days	0%	Wed 3/2/21	Wed 10/2/21	NA	NA	Mon 15/3/21	Mon 22/3/21	31 days 1 day	1057		K				
.059	Wall Construction up to soffit of S1 Shoring (12d/bay/team x 3) (6 bays)	24 days	0 days	24 days	0%	Thu 11/2/21	Sat 13/3/21	NA	NA	Tue 23/3/21	Thu 22/4/21	31 days 2 day	1058						
060	Waterproofing & Bacfilling before S1 Shoring Removal	12 days	0 days	12 days	0%	Mon 15/3/21	Sat 27/3/21	NA	NA	Fri 23/4/21	Fri 7/5/21	31 days 1 day	1059						
061	S1 Shoring ELS Removal + North/South End Re-propping	7 days		7 days	0%	Mon 29/3/21	Thu 8/4/21	NA	NA	Sat 8/5/21	Sat 15/5/21	31 days 1 day	1060		N N				
062	Scaffold erection for roof slab	24 days		24 days	0%	Fri 9/4/21	Fri 7/5/21	NA	NA	Mon 17/5/21	Tue 15/6/21	31 days 2 day	1061						
063	Roof slab construction (18d/bay/team x 3) (6 bays)	42 days	-	42 days	0%	Sat 8/5/21	Mon 28/6/21		NA	Wed 16/6/21	Wed 4/8/21	31 days 4 days	1062						
1064	Waterproofing & Backfilling upto tunnel top	28 days		28 days	0%	Tue 29/6/21	Sat 31/7/21		NA	Thu 5/8/21	Mon 6/9/21	31 days 4 days	1063						
1065	Scaffold removal after 28 days from casting	22 days		22 days	0%	Mon 26/7/21	Thu 19/8/21		NA	Thu 13/1/22	Thu 10/2/22	141 days 1 day	1063FS+22 days						
1066	Sheetpile extraction (Ch1851-CH1950)	22 days		22 days	0%	Mon 2/8/21	Thu 26/8/21		NA	Tue 7/9/21	Mon 4/10/21	31 days 1 day	1064						
.067	Emergency walkway & median barrier installation		0 days	9 days	0%	Fri 24/9/21	Tue 5/10/21		NA	Fri 11/2/22	Mon 21/2/22	112 days 1 day	323,1066,1040,1						
068	Parapet installation	7 days	0 days	7 days	0%	Wed 6/10/21	Wed 13/10/21	NA	NA	Tue 22/2/22	Tue 1/3/22	112 days 1 day	1067						
069	CH1950 - CH2020 (70m long) (2 x teams) 4 bays x 17.5m long - Average 3 layers of shoring	f 209 days	s 0 days	209 days	0%	Fri 19/3/21	Mon 29/11/21	NA	NA	Sat 6/3/21	Tue 1/3/22	-11 days							
1070	Drive sheet pile (approx. 8,800m embedded length sheetpile), 380m/team/day	24 days	0 days	24 days	0%	Fri 19/3/21	Mon 19/4/21	NA	NA	Sat 6/3/21	Tue 6/4/21	-11 days 1 day	1027						
1071	Excavation with Shoring Installation - Prod. Rate: 2 teams x 250m3/d/team. (14.500m3)	30 days	0 days	30 days	0%	Tue 20/4/21	Wed 26/5/21	NA	NA	Wed 7/4/21	Wed 12/5/21	-11 days 1 day	1049,1070						
1072	Rock Fill Replacement	6 days	0 days	6 days	0%	Thu 27/5/21	Wed 2/6/21	NA	NA	Thu 13/5/21	Thu 20/5/21	-11 days 0.5 days	s 1071		H				
1073	Blinding	1 day	0 days	1 day	0%	Thu 3/6/21	Thu 3/6/21	NA	NA	Fri 21/5/21	Fri 21/5/21	-11 days 0.5 days	s 1071,1072						
074	Base Slab - 4 bays. Prod. Rate: 12d/team/bay include pipe laying. 2 team	26 days	0 days	26 days	0%	Fri 4/6/21	Tue 6/7/21	NA	NA	Sat 22/5/21	Tue 22/6/21	-11 days 2 days	1073		<b>—</b>				
075	Wall - 4 bays. Prod. Rate: 3 level of shoring 12d/bay/level/team. 2 teams	67 days	0 days	67 days	0%	Wed 16/6/21	Thu 2/9/21	NA	NA	Wed 2/6/21	Fri 20/8/21	-11 days 6 days	1074SS+9 days		<b></b>	•			
076	Backfill & extract sheet pile (CH1950 to CH2020)	25 days	0 days	25 days	0%	Fri 3/9/21	Mon 4/10/21	NA	NA	Sat 21/8/21	Sat 18/9/21	-11 days 2 days	1075			<b>T</b> he little			
077	CH1950 to CH2020: Emergency walkway & median barrier installation	20 days	0 days	20 days	0%	Tue 5/10/21	Thu 28/10/21	NA	NA	Mon 3/1/22	Tue 25/1/22	73 days 2 days	1075,1076			<b>T</b> -			
.078	CH1950 to CH2020: Pavement work	7 days	0 days	7 days	0%	Fri 29/10/21	Fri 5/11/21	NA	NA	Wed 26/1/22	Sat 5/2/22	73 days 1 day	1077			*			
1079	CH1950 to CH2020: Parapet installation	20 days	0 days	20 days	0%	Sat 6/11/21	Mon 29/11/21	NA	NA	Mon 7/2/22	Tue 1/3/22	73 days 2 day	1076,1077,1078			<b></b>			
1080	South Depressed Road CH2020-2050 (40m long) (2 x teams) 5 bays x 13.5m long -	134 days	s 0 days	134 days	0%	Mon 2/8/21	Tue 11/1/22	NA	NA	Sun 5/9/21	Tue 1/3/22	30 days							
1081	Average 2 layers of shoring Open Excavation	17 days		17 days	0%	Tue 5/10/21	Mon 25/10/21	NA	NA	Mon 20/9/21	Mon 11/10/21	-11 days 3 days	1076						
1082	Blinding	2 days		2 days	0%	Tue 26/10/21			NA	Tue 12/10/21		-11 days 0 days				,			
1083	South Depress Road - Formworks Design and Method Statement Submission	0 days		0 days	0%	Mon 2/8/21	Mon 2/8/21		NA	Sun 5/9/21	Sun 5/9/21	34 days 1 day				2/8			
1084	South Depress Road - Formworks Design and Method Statement Comment &	40 days		40 days	0%	Mon 2/8/21	Fri 10/9/21		NA	Sun 5/9/21	Thu 14/10/21		1083			<b>Ļ</b>			
	Appraoval												1083						
1085	Base Slab - 3 bays. Prod. Rate: 12d/team/bay include pipe laying. 2 teams	12 days		12 days	0%	Thu 28/10/21			NA	Fri 15/10/21	Thu 28/10/21								
1086	Wall - 3 bays. Prod. Rate: 2 level of shoring 12d/bay/level/team. 2 teams	12 days		12 days	0%	Fri 12/11/21	Thu 25/11/21		NA	Sat 30/10/21	Fri 12/11/21	-11 days 0.5day	1085SS+13 days						
1087	Wall - 3 bays. Prod. Rate: 2 level of shoring 12d/bay/level/team. 2 teams	12 days		12 days	0%	Sat 20/11/21	Fri 3/12/21		NA	Mon 8/11/21	Sat 20/11/21	-11 days 0.5day	1086SS+7 days						
1088	Backfill & extract sheet pile	19 days		19 days	0%	Fri 26/11/21	Fri 17/12/21		NA	Fri 14/1/22	Tue 8/2/22	39 days 1 day	1086						
1089	Curing and Formwork Ramoval	19 days		19 days	0%	Fri 26/11/21	Fri 17/12/21		NA	Thu 30/12/21	Fri 21/1/22	27 days 1 day	1086						
1090	Emergency walkway & median barrier installation	6 days	0 days	6 days	0%	Sat 18/12/21	Fri 24/12/21	NA	NA	Wed 9/2/22	Tue 15/2/22	39 days 2 days	1086,1088,323						
1091	Pavement work	6 days	0 days	6 days	0%	Tue 28/12/21	Tue 4/1/22	NA	NA	Wed 16/2/22	Tue 22/2/22	39 days 1 day	1090						
1092	Parapet installation	6 days	0 days	6 days	0%	Wed 5/1/22	Tue 11/1/22	NA	NA	Wed 23/2/22	Tue 1/3/22	39 days 1 day	1090,1088,1091						
1093	5.0 CH1386-1950 (564m): Utlity Laying Team 2 (by Others)	332 days	o days	332 days	0%	Sat 17/4/21	Mon 14/3/22	NA	NA	Thu 19/8/21	Tue 1/3/22	-13 days							
1094	CLP (132kV)	30 days	0 days	30 days	0%	Fri 14/1/22	Sat 12/2/22	NA	NA	Mon 31/1/22	Tue 1/3/22	17 days 1 day	946,990,1027						
1095	HKCG	18 days	0 days	18 days	0%	Fri 14/1/22	Mon 31/1/22	NA	NA	Tue 25/1/22	Fri 11/2/22	11 days 1 day	946,990,1027						
· =	11 Drog with Drogress Task	Summary			Inactive M	filestone 🔷		Duration-or	ılv		Start-only	Е	External M	lestone $\diamondsuit$	<u> </u>	Critical Split			<u> </u>
itle: Rev.1 as of 22-N	r i Prog with Progress	D	nmary		Inactive S				mmary Rollup		Finish-only	3	Deadline			Progress			
201221	Milestone •	Inactive Ta	sk		Manual Ta	ask		Manual Sur	nmary		External Tas	ks	Critical			Manual Progres	s —		

Pump Room Next to Underpass:  Finishing Works and E&M in Pump Installation  Pump Installation for Section Installation  Pump Installation for Section Installation  Pump Installation  Pump Installation for Section Installation  Pump Installat							Con	tract No. ED	D/2018/01 KT	D Project													
Towngas telecom  North & South Depress Raod and Prinishing & Fitting Out Work Itol Pump Room Next to Underpass:  Finishing Works and E&M in Pump Installation  Pump Installation  Pump Installation  Pump Installation  Pump Installation  Planned Completion for Section of Sections 2,4 and 8  Poffsite 14 units of precast box culvers Itol Itol Installation of Existing Seawall and Itol Installation of Silt Curtain with Country Itol Installation of Silt Curtain with Itol Installation of Silt Curtain with Itol Installation of Existing Seawall Itol Installation of Existing Installation Itol Installa		Duration	Actual Duration	Remaining Duration	Physical % Complete	Early Start			Actual Finish		Late Finish	Total TRA Slack		2020	04		2021	04 01		022	04	202	
North & South Depress Raod and Finishing & Fitting Out Work Finishing Works and E&M in Pump Room Next to Underpass: Finishing Works and E&M in Pump Installation Festing and Commissioning Flanned Completion for Section Flanned Completion for Section Flanned Complet		15 days		15 days	0%	Fri 21/1/22	Fri 4/2/22	NA	NA	Tue 1/2/22	Tue 15/2/22	11 days 1 day	1095SS+7 days,	Q3	Q4 (	Q1   Q2	Q3	Q4 Q1	Q2	Q5   0	Ų4   Ų1	Q2	Q3   C
North & South Depress Raod and Finishing & Fitting Out Work Finishing & Fitting Out Work Finishing & Fitting Out Work Finishing Works and E&M in Pump Room Next to Underpass: Finishing Works and E&M in Pump Installation Festing and Commissioning Flanned Completion for Section Flanned Completion for Cast in-situ Box Connection for Connecting Preca Flanned Completion for Section		13 days	0 days	13 days	0%	Fri 28/1/22	Wed 9/2/22	NA	NA	Tue 8/2/22	Sun 20/2/22	11 days 1 day	1096SS+7 days					<b>           </b>					
Finishing & Fitting Out Work Pump Room Next to Underpass: Finishing Works and E&M in Pump Installation  Pump Installation  Pump Installation  Planned Completion for Section in	is telecom	15 days	0 days	15 days	0%	Fri 4/2/22	Fri 18/2/22	NA	NA	Tue 15/2/22	Tue 1/3/22	11 days 1 day	1097SS+7 days										
Pump Room Next to Underpass:  Finishing Works and E&M in Pump Installation  Pump Installation  Pump Installation  Planned Completion for Section in Planned Completion of Section in Se	South Depress Raod and Underpass: Finishing and E&M Works	120 days	0 days	120 days	0%	Tue 5/10/21	Tue 1/3/22	NA	NA	Tue 5/10/21	Tue 1/3/22	0 days											
Finishing Works and E&M in Pump Installation Pump Installation Testing and Commissioning Planned Completion for Section Sections 2,4 and 8 Toffsite 14 units of precast box culve MDN application Demolition of Existing Seawall and Installation of Silt Curtain with Completion of Existing Seawall and Completion of Existing Seawall Temporary Works Design Preparation CH86 to CH70 ELS Works Temporary Works Design Preparation CH86 to CH70 ELS Works Temporary Works Design Preparation CH86 to CH70 ELS Works Comment by PM Sheetpiling Installation with Ground Sheetpiling Installation with Ground Sheetpiling Installation with Ground Sheetpiling Installation (80m on parameter) CH70 to CH30 ELS Works CONSTRUCTION of Cast in-situ Box Connection of Formation and Lay CONSTRUCTION of Cast in-situ Box Connection to Extisting Box Culvers Connection to Existing Box Culvers The Construction of Connecting Precast Units Installation Testing Dox Seawall Reinstatement Section 4: Part 2E Abandon Existing DCS - Temp. Appraoval Part 2E - Abandon of existing DCS - Temp. Appraoval Part 2E - Abandon of existing DCS - Temp. Appraoval Part 2E - Abandon of existing DCS - Temp. Appraoval Part 2E - Abandon of existing DCS - Temp. Appraoval Part 2E - Abandon of existing DCS - Temp. Appraoval Part 2E - Abandon of existing DCS - Temp. Appraoval Part 2E - Abandon of existing DCS - Temp. Appraoval Part 2E - Abandon of existing DCS - Temp. Appraoval Part 2E - Abandon of existing DCS - Temp. Appraoval Part 2E - Abandon of existing DCS - Temp. Appraoval Part 2E - Abandon of existing DCS - Temp. Appraoval Part 2E - Abandon of existing DCS - Temp. Appraoval Part 2E - Abandon of existing DCS - Temp. Appraoval	shing & Fitting Out Work, and E&M Works Installation	120 days	0 days	120 days	0%	Tue 5/10/21	Tue 1/3/22	NA	NA	Tue 5/10/21	Tue 1/3/22	0 days 8 days	306,271,323,108					<b>k</b>	K				
Pump Installation Testing and Commissioning Planned Completion for Section of Planned Completion of Section of Sections 2,4 and 8  1107 Offsite 14 units of precast box culver of MDN application 1109 Demolition of Existing Seawall and Completion of Existing Seawall of Installation of Silt Curtain with Completion of Existing Seawall of Completion of Comple	oom Next to Underpass: Finishing and E&M Works	158 days	0 days	158 days	0%	Sat 17/4/21	Tue 26/10/21	NA	NA	Thu 19/8/21	Tue 1/3/22	102 days						<b>4</b>           /					
Testing and Commissioning Planned Completion for Section 1 106 Sections 2,4 and 8 1107 Offsite 14 units of precast box culve 1108 MDN application 1109 Demolition of Existing Seawall and Completion of Silt Curtain with Completion of Existing Seawall and Completion of Existing Seawall and Completion of Existing Seawall and Completion of Existing Seawall Completion of Completion and Lagrangian Completion of Completion of Completion and Handle Completion of Completion of Completion and Handle Completion of Completion of Completion and Handle Completion of Compl	shing Works and E&M installation	73 days	0 days	73 days	0%	Sat 17/4/21	Thu 15/7/21	NA	NA	Thu 19/8/21	Mon 15/11/21	102 days 3 days	1042FS+36 days										
Planned Completion for Section 1 106 Sections 2,4 and 8 1107 Offsite 14 units of precast box culvers of the process of the pro	p Installation	60 days	0 days	60 days	0%	Fri 16/7/21	Fri 24/9/21	NA	NA	Tue 16/11/21	Thu 27/1/22	102 days 2 days	1102				T.						
1106 Sections 2,4 and 8  1107 Offsite 14 units of precast box culve 1108 MDN application  1109 Demolition of Existing Seawall and 1110 Installation of Silt Curtain with C 1111 Demolition of Existing Seawall 1112 Grade 200 rock filling and placin 1113 CH86 to CH70 ELS Works 1114 Temporary Works Design Prepar 1115 Comment by PM 1116 Sheetpiling Installation with Ground Sheetpiling Installation with Ground Sheetpiling Installation with Shoring Installation 1117 Excavation with Shoring Installation 1118 Preparation of formation and laying CH70 to CH30 ELS Works 1120 Sheetpiling Installation (80m on preparation of Formation and Laying CH70 to CH30 ELS Works 1121 Excavation with Shoring Installation General Sheetpiling Installation (80m on preparation of Formation and Laying Construction of Cast in-situ Box Connection to Extisting Box Culvilia Construction of Cast in-situ Box Connection to Extisting Box Culvilia Installation 1124 Precast Units Installation 1125 Preparation for Connecting Precast Units Installation of 14 precast units with Eackfilling upto Final Formation Inspection Shaft Construction and Hackfilling upto Final Formation Seawall Reinstatement 1129 Seawall Reinstatement 1129 Seawall Reinstatement 1129 Seawall Reinstatement 1130 Abandon Existing DCS - Temp. Appraoval 1131 Abandon Existing DCS - Temp. Appraoval 1132 Part 2E - Abandon of existing DCS - Temp. Appraoval 1133 Planned Completion for Section A	ing and Commissioning	25 days	0 days	25 days	0%	Sat 25/9/21	Tue 26/10/21	NA	NA	Fri 28/1/22	Tue 1/3/22	102 days 1 days	1102,1103					<b>/</b>					
1107 Offsite 14 units of precast box culve 1108 MDN application 1109 Demolition of Existing Seawall an C 1110 Installation of Silt Curtain with C 1111 Demolition of Existing Seawall 1112 Grade 200 rock filling and placin 1113 CH86 to CH70 ELS Works 1114 Temporary Works Design Prepar 1115 Comment by PM 1116 Sheetpiling Installation with Ground Sheetpiling Installation with Ground Excavation with Shoring Installation 1117 Excavation of formation and layi 1119 CH70 to CH30 ELS Works 1120 Sheetpiling Installation (80m on preparation of Formation and Layi 1121 Excavation with Shoring Installation 1122 DCS Seawater Intake (Insitu Section 1123 Construction of Cast in-situ Box Connection to Extisting Box Culvi 1124 Precast Units Installation 1125 Preparation for Connecting Precast Units Installation 1126 Installation of 14 precast units wi 1127 Inspection Shaft Construction and Hackfilling upto Final Formation 1128 Seawall Reinstatement 1129 Section 4: Part 2E 1130 Abandon Existing DCS - Temp. Appraoval 1131 Abandon Existing DCS - Temp. Appraoval 1132 Part 2E - Abandon of existing DCS 1133 Planned Completion for Section 4	Completion for Section 1	0 days	0 days	0 days	0%	Mon 14/3/22	Mon 14/3/22	NA	NA	Tue 1/3/22	Tue 1/3/22	-13 days	1408,1414,1068,						14/3				
MDN application  Demolition of Existing Seawall and Completion of Existing Seawall Demolition of Existing Seawall Completion of Existing Excavaling Installation Preparation of Examination and Lay Completion of Completion of Completion of Completion and Lay Completion of Existing Excavation with Shoring Installation Completion of Formation and Lay Completion of Existing Excavation of Formation and Lay Completion of Completion of Completion of Completion of Completion of Completion of Completion and Lay Completion Shaft Construction and Hage Completion Section 4 Part 2E Completion for Section 4 Part 2E Completion for Section 4 Part 2E Completion for Section 4 Planned	nd 8	824 days	0 days	824 days	0%	Mon 10/8/20	Wed 17/5/23	NA	NA	Mon 17/8/20	Wed 29/5/24	6 days						<u>- Н</u>					
Demolition of Existing Seawall and Competition of Silt Curtain with Competition of Silt Curtain with Competition of Existing Seawall Demolition of Existing Seawall Grade 200 rock filling and placin CH86 to CH70 ELS Works  Comment by PM  Sheetpiling Installation with Grown of Excavation with Shoring Installation and laying CH70 to CH30 ELS Works  CH70 to CH30 ELS W	units of precast box culvert with outfall fabrication	100 days	0 days	100 days	0%	Mon 19/10/20	Fri 19/2/21	NA	NA	Thu 3/12/20	Thu 8/4/21	38 days 30 days	406,414										
Installation of Silt Curtain with C Installation of Silt Curtain with C Installation of Existing Seawall CH86 to CH70 ELS Works Installation of Existing Seawall CH86 to CH70 ELS Works CH86 to CH70 ELS Works Installation Works Design Preparation CH86 to CH70 ELS Works Installation with Ground Sheetpiling Installation with Ground Excavation with Shoring Installation CH70 to CH30 ELS Works Installation Generation and Lay CH70 to CH30 ELS Works Installation Generation and Lay CH70 to CH30 ELS Works Installation Generation and Lay CH70 to CH30 ELS Works Installation Generation and Lay Installation of Formation and Lay Installation of Cast in-situ Box Connection to Extisting Box Culv Installation of I4 precast units with Installation Inspection Shaft Construction and Hackfilling upto Final Formation Inspection Shaft Construction of Construction and Hackfilling upto Final Formation Inspection Shaft Co	cation	45 days	0 days	45 days	0%	Mon 26/10/20	Wed 9/12/20	NA	NA	Sun 21/1/24	Tue 5/3/24	1182 d 1 days											
Demolition of Existing Seawall Grade 200 rock filling and placin CH86 to CH70 ELS Works Temporary Works Design Prepar Comment by PM Sheetpiling Installation with Grow Excavation with Shoring Installat Preparation of formation and layi CH70 to CH30 ELS Works CH70 to CH30 ELS Works CH70 to CH30 ELS Works DCS Seawater Intake (Insitu Section of Formation and Layi Preparation of Formation and Layi CNS Seawater Intake (Insitu Section to Extisting Box Culvater Connection to Extisting Box Culvater Connection for Connecting Precase Units Installation Preparation of 14 precast units with Shoring Installation Preparation for Connecting Precase Units Installation Preparation for Connecting Precase Units Installation Preparation of 14 precast units with Sackfilling upto Final Formation Seawall Reinstatement Section 4: Part 2E Abandon Existing DCS - Temp. Appraoval Part 2E - Abandon of existing DCS Planned Completion for Section 4	of Existing Seawall an Construction of Water Channel (Ch 0 to Ch30)	67 days	0 days	67 days	0%	Thu 10/12/20	Thu 4/3/21	NA	NA	Wed 6/3/24	Wed 29/5/24	962 days				<b>-</b>							
Demolition of Existing Seawall Grade 200 rock filling and placin CH86 to CH70 ELS Works Temporary Works Design Prepar Comment by PM Sheetpiling Installation with Grow Excavation with Shoring Installat Preparation of formation and layi CH70 to CH30 ELS Works CH70 to CH30 ELS Works CH70 to CH30 ELS Works DCS Seawater Intake (Insitu Section of Formation and Layi Preparation of Formation and Layi CNS Seawater Intake (Insitu Section to Extisting Box Culvater Connection to Extisting Box Culvater Connection for Connecting Precase Units Installation Preparation of 14 precast units with Shoring Installation Preparation for Connecting Precase Units Installation Preparation for Connecting Precase Units Installation Preparation of 14 precast units with Sackfilling upto Final Formation Seawall Reinstatement Section 4: Part 2E Abandon Existing DCS - Temp. Appraoval Part 2E - Abandon of existing DCS Planned Completion for Section 4	ion of Silt Curtain with Concrete Sinkers	6 days		6 days	0%	Thu 10/12/20	Wed 16/12/2	0 NA	NA	Thu 23/5/24	Wed 29/5/24	1023 d 1 day	1108										
Temporary Works Design Preparation Comment by PM Comment b	tion of Existing Seawall	37 days		37 days	0%	Thu 10/12/20	Mon 25/1/21	NA	NA	Wed 6/3/24	Mon 22/4/24	962 days 1 day	1108										
Temporary Works Design Preparation Comment by PM Comment b	00 rock filiing and placing levelling stone	30 days		30 days	0%	Tue 26/1/21		NA	NA	Tue 23/4/24		962 days 1 day	1111		$\  \  \ _{\mathbf{i}}$								
1114 Temporary Works Design Prepar 1115 Comment by PM 1116 Sheetpiling Installation with Grot 1117 Excavation with Shoring Installat 1118 Preparation of formation and layi 1119 CH70 to CH30 ELS Works 1120 Sheetpiling Installation (80m on part 1121 Excavation with Shoring Installat 1122 Pocs Seawater Intake (Insitu Section 1123 Construction of Cast in-situ Box 1124 Precast Units Installation 1125 Preparation for Connecting Preca 1126 Installation of 14 precast units wi 1127 Inspection Shaft Construction and 1128 Seawall Reinstatement 1129 Section 4: Part 2E 1130 Abandon Existing DCS - Temp. 1 1131 Abandon Existing DCS - Temp. 1 1132 Part 2E - Abandon of existing DC 1133 Planned Completion for Section 4		136 days		136 days	0%	Mon 10/8/20	Thu 21/1/21	NA	NA	Mon 17/8/20	Sat 27/2/21	6 days		$\parallel$									
1115 Comment by PM  1116 Sheetpiling Installation with Grout Excavation with Shoring Installation with Shoring Installation with Shoring Installation Preparation of formation and laying CH70 to CH30 ELS Works  1120 Sheetpiling Installation (80m on preparation of Formation and Laying Installation (80m on preparation of Formation and Laying Installation Preparation of Formation and Laying Installation Construction of Cast in-situ Box Connection to Extisting Box Culving Precast Units Installation  1124 Precast Units Installation  1125 Preparation for Connecting Precast Units Installation  1126 Installation of 14 precast units with Backfilling upto Final Formation Installation		25 days		25 days	0%	Mon 10/8/20	Mon 7/9/20		NA	Mon 17/8/20		6 days 1 days											
Sheetpiling Installation with Grout Excavation with Shoring Installation With Shoring Installation Preparation of formation and laying CH70 to CH30 ELS Works  1120 Sheetpiling Installation (80m on preparation of Formation and Laying Installation (80m on preparation of Formation and Laying Installation (80m on preparation of Formation and Laying Installation General Installation Inspection Shaft Construction and Hackfilling upto Final Formation Inspection Installation Inspection Installation Inspection Installation Inspection Installation Inspection Installation Inspection Installation Inspection Inspection Inspection Inspection Inspection Installation Inspection I		25 days		25 days	0%	Tue 8/9/20	Thu 8/10/20		NA	Tue 15/9/20		6 days 1 days	1114	_									
Excavation with Shoring Installation  Preparation of formation and laying  CH70 to CH30 ELS Works  CH70 to CH30 ELS Works  Excavation with Shoring Installation  Excavation with Shoring Installation  Excavation with Shoring Installation  Excavation of Formation and Laying  Construction of Cast in-situ Box  Connection to Extisting Box Culv  Precast Units Installation  Preparation for Connecting Precast  Installation of 14 precast units with End of the Short Construction and Laying  Inspection Shaft Construction and Hard Backfilling upto Final Formation  Excavation with Shoring Installation  Construction of Cast in-situ Box  Connection to Extisting Box Culv  Precast Units Installation  Inspection Shaft Construction and Hard Backfilling upto Final Formation  Excavation with Shoring Installation  Inspection of Cast in-situ Box  Construction of Cast in-situ Box  Packfilling upto Final Formation  Abandon Existing DCS - Temp. Appraoval  Abandon Existing DCS - Temp. Appraoval  Part 2E - Abandon of existing DCS  Planned Completion for Section 4	ling Installation with Grouting & Pumping Test (56m long on plan)	50 days		50 days	0%	Fri 16/10/20	Mon 14/12/20		NA	Fri 16/10/20		0 days 1 day	1420,1423,1115										
Preparation of formation and layi  CH70 to CH30 ELS Works  Sheetpiling Installation (80m on particular and preparation of Formation and Layi  Excavation with Shoring Installation and Layi  Excavation of Formation and Layi  DCS Seawater Intake (Insitu Section Construction of Cast in-situ Box Connection to Extisting Box Culvary  Precast Units Installation  Preparation for Connecting Precast Installation of 14 precast units with English and Packfilling upto Final Formation  Inspection Shaft Construction and + Backfilling upto Final Formation  Excavation of Cast in-situ Box Culvary  Precast Units Installation  Inspection for Connecting Precast Inspection Shaft Construction and + Backfilling upto Final Formation  Excavation of Cast in-situ Box Culvary  Preparation of Cast in-situ Box Culvary  Inspection Shaft Construction and + Backfilling upto Final Formation  Handle Seawall Reinstatement  Section 4: Part 2E  Abandon Existing DCS - Temp. Appraoval  Part 2E - Abandon of existing DCS  Planned Completion for Section 4	ion with Shoring Installation (1350 cu.m., 150 cu.m./d)	12 days		12 days	0%	Tue 15/12/20			NA	Tue 22/12/20	Thu 7/1/21	6 days 3 day	1116										
1119 CH70 to CH30 ELS Works  1120 Sheetpiling Installation (80m on preparation of Formation and Lage Preparation of Formation and Lage Preparation of Formation and Lage Preparation of Cast in-situ Box Connection to Extisting Box Culver Precast Units Installation  1124 Precast Units Installation  1125 Preparation for Connecting Precast Units Installation  1126 Installation of 14 precast units with Backfilling upto Final Formation  1127 Inspection Shaft Construction and Hackfilling upto Final Formation  1128 Seawall Reinstatement  1129 Section 4: Part 2E  1130 Abandon Existing DCS - Temp. Appraoval  1131 Abandon Existing DCS - Temp. Papparaoval  1132 Part 2E - Abandon of existing DCS		18 days		18 days	0%		Thu 21/1/21		NA	Thu 4/2/21	Sat 27/2/21	29 days 0.5 day	1117										
Sheetpiling Installation (80m on present the content of the conten		43 days		43 days	0%		Thu 21/1/21  Thu 7/1/21	NA	NA	Mon 16/11/20	Thu 7/1/21	0 days	1117		-								
Excavation with Shoring Installat Preparation of Formation and Lay 1122 DCS Seawater Intake (Insitu Section 1123 Construction of Cast in-situ Box Connection to Extisting Box Culvillation 1124 Precast Units Installation 1125 Preparation for Connecting Precast Units Installation 1126 Installation of 14 precast units will 1127 Inspection Shaft Construction and + Backfilling upto Final Formation 1128 Seawall Reinstatement 1129 Section 4: Part 2E 1130 Abandon Existing DCS - Temp. Appraoval 1131 Abandon Existing DCS - Temp. Appraoval 1132 Part 2E - Abandon of existing DCS - Temp. 1133 Planned Completion for Section 4		14 days		14 days	0%		Tue 1/12/20		NA	Mon 16/11/20	Tue 1/12/20	0 days 0.5 day	1116SS+25 days										
Preparation of Formation and Lay  DCS Seawater Intake (Insitu Section  Construction of Cast in-situ Box Connection to Extisting Box Culv  Precast Units Installation  Preparation for Connecting Preca  Installation of 14 precast units wi  Inspection Shaft Construction and + Backfilling upto Final Formation  Seawall Reinstatement  Section 4: Part 2E  Abandon Existing DCS - Temp. Appraoval  Abandon Existing DCS - Temp. Appraoval  Part 2E - Abandon of existing DCS  Planned Completion for Section 4	ion with Shoring Installation (4500 cu.m., 160 cu.m./d x 1 team) and		0 days	29 days	0%		Thu 7/1/21		NA NA			0 days 0.5 day	,										
Construction of Cast in-situ Box Connection to Extisting Box Culvillary Precast Units Installation Preparation for Connecting Precast Units Installation Installation of 14 precast units with Installation of 14 precast units with Backfilling upto Final Formation Inspection Shaft Construction and + Backfilling upto Final Formation Inspection 4: Part 2E Seawall Reinstatement Section 4: Part 2E Abandon Existing DCS - Temp. Appraoval Part 2E - Abandon of existing DCS Planned Completion for Section 4	tion of Formation and Laying of Blinding Layer	29 days	0 days	29 days	0 70	W Cd 2/12/20	111u //1/21	INA	IVA.	WCu 2/12/20	111u //1/21	o days 1 day	1120										
Connection to Extisting Box Cul- 1124 Precast Units Installation 1125 Preparation for Connecting Preca 1126 Installation of 14 precast units wi 1127 Inspection Shaft Construction and + Backfilling upto Final Formation 1128 Seawall Reinstatement 1129 Section 4: Part 2E 1130 Abandon Existing DCS - Temp. Appraoval 1131 Abandon Existing DCS - Temp. Appraoval 1132 Part 2E - Abandon of existing DCS 1133 Planned Completion for Section 4	ater Intake (Insitu Section Bay 15)	41 days	0 days	41 days	0%	Fri 8/1/21	Sat 27/2/21	NA	NA	Fri 8/1/21	Sat 27/2/21	0 days 1 days			-	71							
Precast Units Installation  Preparation for Connecting Precast Units Installation  Preparation for Connecting Precast Units with Installation of 14 precast units with Inspection Shaft Construction and + Backfilling upto Final Formation  Seawall Reinstatement  Section 4: Part 2E  Abandon Existing DCS - Temp. Appraoval  Abandon Existing DCS - Temp. Pappraoval  Part 2E - Abandon of existing DCS  Part 2E - Abandon of existing DCS  Planned Completion for Section 4	ction of Cast in-situ Box Culvert with feeder pipe installation with tion to Extisting Box Culvert(Bay 15, approx. 12m long)	41 days	0 days	41 days	0%	Fri 8/1/21	Sat 27/2/21	NA	NA	Fri 8/1/21	Sat 27/2/21	0 days 1 day	1117,1121										
1125 Preparation for Connecting Preca  1126 Installation of 14 precast units wi  1127 Inspection Shaft Construction and + Backfilling upto Final Formation  1128 Seawall Reinstatement  1129 Section 4: Part 2E  1130 Abandon Existing DCS - Temp. Appraoval  1131 Abandon Existing DCS - Temp. Appraoval  1132 Part 2E - Abandon of existing DC  1133 Planned Completion for Section 4		151 1	0.1	151 1	Oct	M 1/2/21	T 21/0/21	NIA	NT A	M 1/2/21	T. 20/5/22	0.1											
Installation of 14 precast units with the second of 14 precast uni		151 days		151 days	0%	Mon 1/3/21	Tue 31/8/21		NA	Mon 1/3/21	Tue 30/5/23	0 days	1100 1110										
Inspection Shaft Construction and + Backfilling upto Final Formation  1128 Seawall Reinstatement  1129 Section 4: Part 2E  1130 Abandon Existing DCS - Temp. Abandon Existing DCS - Temp. Appraoval  1131 Part 2E - Abandon of existing DCS  1133 Planned Completion for Section 4	tion for Connecting Precast Units and Cast In-situ Bay 15	6 days		6 days	0%	Mon 1/3/21	Sat 6/3/21	NA	NA	Mon 1/3/21	Sat 6/3/21	0 days 1 days	1123,1118										
+ Backfilling upto Final Formation  1128 Seawall Reinstatement  1129 Section 4: Part 2E  1130 Abandon Existing DCS - Temp. 1  1131 Abandon Existing DCS - Temp. 1  Appraoval  1132 Part 2E - Abandon of existing DC  1133 Planned Completion for Section 4	ion of 14 precast units with feeder pipe installation (2.5 days per unit)	37 days		37 days	0%	Mon 8/3/21	Thu 22/4/21		NA	Mon 8/3/21	Thu 22/4/21	0 days 2 days	1125,1107SS+75 days										
1129 Section 4: Part 2E  1130 Abandon Existing DCS - Temp. \(^1\)  1131 Abandon Existing DCS - Temp. \(^1\)  Appraoval  1132 Part 2E - Abandon of existing DC  1133 Planned Completion for Section 4	on Shaft Construction and Backfilling Upto +2.0mPD + Feeder Pipe Laying illing upto Final Formation Level	; 33 days	0 days	33 days	0%	Fri 23/4/21	Wed 2/6/21	NA	NA	Fri 23/4/21	Wed 2/6/21	0 days 0.5 day	1126										
Abandon Existing DCS - Temp.  Abandon Existing DCS - Temp. Appraoval  Part 2E - Abandon of existing DC  Planned Completion for Section	Reinstatement	75 days	0 days	75 days	0%	Thu 3/6/21	Tue 31/8/21	NA	NA	Sat 25/2/23	Tue 30/5/23	518 days 2 days	1127							444			
Abandon Existing DCS - Temp. Appraoval Part 2E - Abandon of existing DC Planned Completion for Section 4	Part 2E	225 days	0 days	225 days	0%	Mon 15/8/22	Wed 17/5/23	NA	NA	Sat 10/9/22	Tue 30/5/23	10 days										-	
Appraoval Part 2E - Abandon of existing DC Planned Completion for Section 4	n Existing DCS - Temp. Works Design and Method Statement Submission	0 days	0 days	0 days	0%	Mon 15/8/22	Mon 15/8/22	NA	NA	Sat 10/9/22	Sat 10/9/22	26 days 1 day								<b>♦</b> 1578	3		
Appraoval Part 2E - Abandon of existing DC Planned Completion for Section 4	n Existing DCS - Temp. Works Design and Method Statement Comment &	35 days	0 days	35 days	0%	Mon 15/8/22	Sun 18/9/22	NA	NA	Sat 10/9/22	Fri 14/10/22	26 days 1 day	1130										
1133 Planned Completion for Section 4	val	185 days	-	185 days	0%	Mon 3/10/22			NA	Sat 15/10/22	Tue 30/5/23	10 days 9 days	20,1131										
		0 days		0 days	0%	Wed 17/5/23			NA	Tue 30/5/23	Tue 30/5/23	10 days	1132									17	7/5
Division of the	Part 2A - Diversion & abandon of extg DCS box culvert	194 days		194 days	0%	Thu 1/4/21	Wed 24/11/2		NA	Fri 9/4/21	Thu 2/12/21	4 days											
1135 Diversion & Abandon of Existing	on & Abandon of Existing DCS Box Culvert - Temp. Works Design and	0 days	-	0 days	0%	Thu 1/4/21	Thu 1/4/21	NA	NA	Fri 9/4/21	Fri 9/4/21	8 days 1 day				1/4							
Method Statement Submission				21 days	0%	Thu 1/4/21	Wed 21/4/21		NA	Fri 9/4/21	Thu 29/4/21	8 days 1 day	1135										
Method Statement Comment & A	Statement Comment & Appraoval	a 21 uays	o auyo	21 days	0,10	111U 1/7/21	04 21/4/21	1414	1121	111 /17121	1110 2/17/21	J duy 1 day	1133										
1137 TTA Implementation	plementation	1 day	0 days	1 day	0%	Thu 22/4/21	Thu 22/4/21	NA	NA	Fri 30/4/21	Fri 30/4/21	7 days 0.5 day	1136										
						I				1	1											111111	
Title: Ray 11 Prog with Progress					Inactive I	Milestone 🔷	·	Duration-o	only		Start-only	Г	External N	/filestone	<b>♦</b>		C	ritical Split					
Fitle: Rev.11 Prog with Progress as of 22-May-20	Progress Task	Summary				···········		Duration	Omj														

							Con	tract No. ED,	/2018/01 K	TD Project																
Task	Name	Duration	Actual Duration	Remaining Duration	Physical % Complete	Early Start	Early Finish	Actual Start	Actual Fini	sh Late Start	Late Finish	Total Slack	TRA	Predecessors	2020 Q2   Q3	04	01   0	2021	04	. 01		2022	04	01	2023 Q2   Q	,
138	Sheetpile Installation	25 days		25 days	0%	Fri 23/4/21	Mon 24/5/21	NA	NA	Mon 3/5/21	Tue 1/6/21	7 days	1 day	1137	42 V3				<u></u>					\(\frac{1}{2}\)		
139	Excavation with Shoring	52 days	0 days	52 days	0%	Tue 25/5/21	Mon 26/7/21	NA	NA	Wed 2/6/21	Tue 3/8/21	7 days	1 day	1138												
140	Diversion of existing DCS box culvert	26 days	0 days	26 days	0%	Tue 27/7/21	Wed 25/8/21	NA	NA	Wed 4/8/21	Thu 2/9/21	7 days	2 days	1137,410,1139												
1141	Break up existing box culvert (4 walls) + top slab	35 days	0 days	35 days	0%	Thu 26/8/21	Thu 7/10/21	NA	NA	Fri 3/9/21	Sat 16/10/21	7 days	2 days	1140												
1142	Construct new walls at existing box culvert	20 days	0 days	20 days	0%	Fri 8/10/21	Mon 1/11/21	NA	NA	Mon 18/10/21	Tue 9/11/21	7 days	1 days	1141					Ĭ.							
1143	Abandon existing DCS box culvert	20 days	0 days	20 days	0%	Tue 2/11/21	Wed 24/11/2	1 NA	NA	Wed 10/11/21	Thu 2/12/21	7 days	1 days	1142												
1144	Planned Completion for Section 8	0 days	0 days	0 days	0%	Wed 24/11/21	Wed 24/11/2	1 NA	NA	Thu 2/12/21	Thu 2/12/21	7 days	0 days	1143					ė	24/11						
.145 S	ection 3	729 days	0 days	729 days	0%	Thu 16/5/19	Tue 26/10/21	NA	NA	Tue 2/6/20	Tue 2/11/21	6 days		-					,							
146	Part 2C - Lift LT3 & LT4	729 days	0 days	729 days	0%	Thu 16/5/19	Tue 26/10/21	NA	NA	Tue 2/6/20	Tue 2/11/21	6 days		-												
147	Access Date - Part 2A,2C	0 days	0 days	0 days	0%	Tue 2/6/20	Tue 2/6/20	NA	NA	Tue 2/6/20	Tue 2/6/20	0 days	0 days	4FS+369 days	2/6											
148	Mobilization of plant and materials	15 days		15 days	0%	Thu 16/5/19	Sat 1/6/19	NA	NA	Sat 4/7/20	Tue 21/7/20	337 days	1 days			ЩШ										
149	TTA implementation	4 days		4 days	0%	Tue 2/6/20	Fri 5/6/20	NA	NA	Fri 17/7/20	Tue 21/7/20	37 days		1147												
	•												1 uay	1147												
150	Carry out Titpit and Identify Underground Utilities location  Discuss with Relevant Utilities Undertakers	12 days		12 days	0%	Mon 15/6/20	Fri 26/6/20	NA	NA	Mon 22/6/20	Fri 3/7/20	7 days		1150												
151		18 days		18 days	0%	Sat 27/6/20	Tue 14/7/20		NA	Sat 4/7/20	Tue 21/7/20	7 days	4.7	1150												
152	Slew CLP Cable and Abandon Telecom Cable (tentative)	75 days		75 days	0%	Wed 15/7/20	Mon 12/10/2		NA	Wed 22/7/20	Mon 19/10/20			1148,1149,1151												
153		0 days		0 days	0%	Tue 4/8/20	Tue 4/8/20	NA	NA	Tue 15/9/20	Tue 15/9/20	42 days	1 day		4,	8										
154	Lift Tower Foundation - Temp. Works Design and Method Statement Comment & Appraoval	35 days	0 days	35 days	0%	Tue 4/8/20	Mon 7/9/20	NA	NA	Tue 15/9/20	Mon 19/10/20	42 days	1 day	1153												
155	Intall Sheetpile, ELS, Excavation and Temp. Works Installation (Shoring, Drainage & Slope Protection)	38 days	0 days	38 days	0%	Tue 13/10/20	Thu 26/11/20	NA	NA	Tue 20/10/20	Thu 3/12/20	6 days	2 days	1154,1152							+++					
156	• '	38 days	0 days	38 days	0%	Fri 27/11/20	Wed 13/1/21	NA	NA	Fri 4/12/20	Wed 20/1/21	6 days	2 days	1148,1152,175,1												
157	Sheepile Extraction & Backilling	13 days	0 days	13 days	0%	Thu 14/1/21	Thu 28/1/21	NA	NA	Thu 21/1/21	Thu 4/2/21	6 days	1 day	1156												
158	Lift Tower - Temp. Works Design and Method Statement Submission	0 days	0 days	0 days	0%	Mon 2/11/20	Mon 2/11/20	NA	NA	Fri 1/1/21	Fri 1/1/21	60 days	1 day			2/11										
159	Lift Tower - Temp. Works Design and Method Statement Comment & Appraoval	35 days	0 days	35 days	0%	Mon 2/11/20	Sun 6/12/20	NA	NA	Fri 1/1/21	Thu 4/2/21	60 days	1 day	1158												
160	Lift Shaft Tower: 3 Lifts x 20 day/Lift, Falsework & Formwork Erection, Rebar	63 days	0 days	63 days	0%	Fri 29/1/21	Mon 19/4/21	NA	NA	Fri 5/2/21	Mon 26/4/21	6 days	3 days	1156,1159,1157												
161	Fixing & Concreting Lift installation (LT3 & LT4)	90 days	0 days	90 days	0%	Tue 20/4/21	Fri 6/8/21	NA	NA	Tue 27/4/21	Fri 13/8/21	6 days	5 days	1160,713												
162	E & M installation	30 days		30 days	0%	Sat 7/8/21	Fri 10/9/21	NA	NA	Sat 14/8/21	Fri 17/9/21		3 days	1161												
163	Louvers and Glazing Installation	26 days		26 days	0%	Fri 21/5/21	Mon 21/6/21		NA	Sat 14/8/21	Mon 13/9/21	71 days		1160FS+25 days												
164	Parapet Installation and Finishing Works	40 days		40 days	0%	Tue 22/6/21		NA	NA	Tue 14/9/21	Tue 2/11/21		4 days	,												
165	CLP Meter Installation	0 days		0 days	0%	Mon 1/2/21	Mon 1/2/21		NA	Fri 20/8/21	Fri 20/8/21	200 days	1	-			12									
166	EMSD Submission Form 5 for Lift Inspection		0 days	0 days	0%	Mon 1/3/21	Mon 1/3/21		NA	Fri 20/8/21	Fri 20/8/21		0.5 day	1165			1/2									
167	<u> </u>									Fri 3/9/21	Fri 3/9/21			1165 1166FS+14 days			1/3 X 14									
	EMSD Lift Inspection		0 days	0 days	0%	Sun 14/3/21	Sun 14/3/21		NA				0.5 day					/D								
1168	Issuance of Lift Use Permit	0 days	1	0 days	0%	Mon 29/3/21	Mon 29/3/21		NA	Sat 18/9/21	Sat 18/9/21		0.5 day	1167FS+15 days				<b>7</b>								
1169	Testing & commissioning with Statutory Inspection	36 days		36 days	0%	Sat 11/9/21	Tue 26/10/21		NA	Sat 18/9/21	Tue 2/11/21	6 days		1162,1168												
1170	Footpath	28 days		28 days	0%	Tue 20/4/21	Mon 24/5/21		NA	Tue 8/6/21	Mon 12/7/21	40 days		1160												
171	Open Space within Part 2C	94 days	0 days	94 days	0%	Tue 25/5/21	Mon 13/9/21	NA	NA	Tue 13/7/21	Tue 2/11/21	40 days	4 days	1170,1230												
172	Planned Completion for Section 3	0 days	0 days	0 days	0%	Tue 26/10/21	Tue 26/10/21	NA	NA	Tue 2/11/21	Tue 2/11/21	6 days	0 days	1171,1168,1169,					1	26/10						
173 S	ections 5 and 9: Noise Barrier Installation	380 days	6.83 days	373.17 days	0%	Fri 20/3/20	Sat 3/7/21	Fri 20/3/20	NA	Fri 20/3/20	Mon 5/7/21	1 day	1 day													
1174	1.0 Noise Barrier Shop Drawing Preparation, Offsite Fabrication	141 days	20.86 days	120.14 days	0%	Mon 6/4/20	Thu 24/9/20	Mon 6/4/20	NA	Mon 6/4/20	Mon 7/12/20	60 days		r												
1175	CNP and TTA available	0 days	0 days	0 days	0%	Wed 24/6/20	Wed 24/6/20	NA	NA	Thu 20/8/20	Thu 20/8/20	47 days	1 day		4 24/6											
176	Expose the Extisting Noise Barrier Foundation	70 days	25 days	45 days	36%	Mon 6/4/20	Fri 3/7/20	Mon 6/4/20	NA	Mon 6/4/20	Tue 7/7/20	3 days	1 day													
177	Implement TTA	2 days	0 days	2 days	0%	Mon 13/7/20	Tue 14/7/20	NA	NA	Wed 18/11/20	Thu 19/11/20	107 days	0.5 day													
178	Expose the Extisting Noise Barrier Foundation under Existing Footpath	15 days	0 days	15 days	0%	Wed 15/7/20	Fri 31/7/20	NA	NA	Fri 20/11/20	Mon 7/12/20	107 days	1 day	1177		$\parallel \parallel \parallel$										
179	Carry out the Site Survey for Existing Holding Down Bolt at Existing Landscaped	6 days	0 days	6 days	0%	Wed 24/6/20	Thu 2/7/20	NA	NA	Thu 20/8/20	Wed 26/8/20	47 days	1 day	1175												
1180	Deck Noise Barrier Shop Drawings Preparation	30 days	1	30 days	0%	Fri 31/7/20	Thu 3/9/20		NA	Fri 21/8/20	Thu 24/9/20	18 days														
1181	Noise Barrier Shop Drawings Comment by PM	18 days		18 days	0%	Fri 4/9/20	Thu 24/9/20		NA	Fri 25/9/20	Sat 17/10/20		0.5 day													
1182	PMAA Panel Material Sample Submission	0 days		0 days	0%	Sat 2/5/20		NA	NA	Sat 6/6/20	Sat 17/10/20	30 days			215											
1102	i maa i aidi magadi sahipit suuhiissiuh	o udys	o uays	o uays	0 70	3at 2/3/20	Sat 2/3/20	IVA	11/1	Sat Ur0/20	Sat 0/0/20	50 uays	ı uays		<b>♦</b> 2/5											
itle: Rev.1	I Prog with Progress	Summary	amort.		Inactive M			Duration-or	-		Start-only		C 3		nal Milestone	<b>♦</b>			Critical							
s of 22-M	lav-20	Project Sun Inactive Ta		U	Inactive Su  Manual Ta			Manual Sui Manual Sui	mmary Rollup		Finish-only  External Tas	1.	4	Deadl Critica		*			Progres	ss 1 Progress						

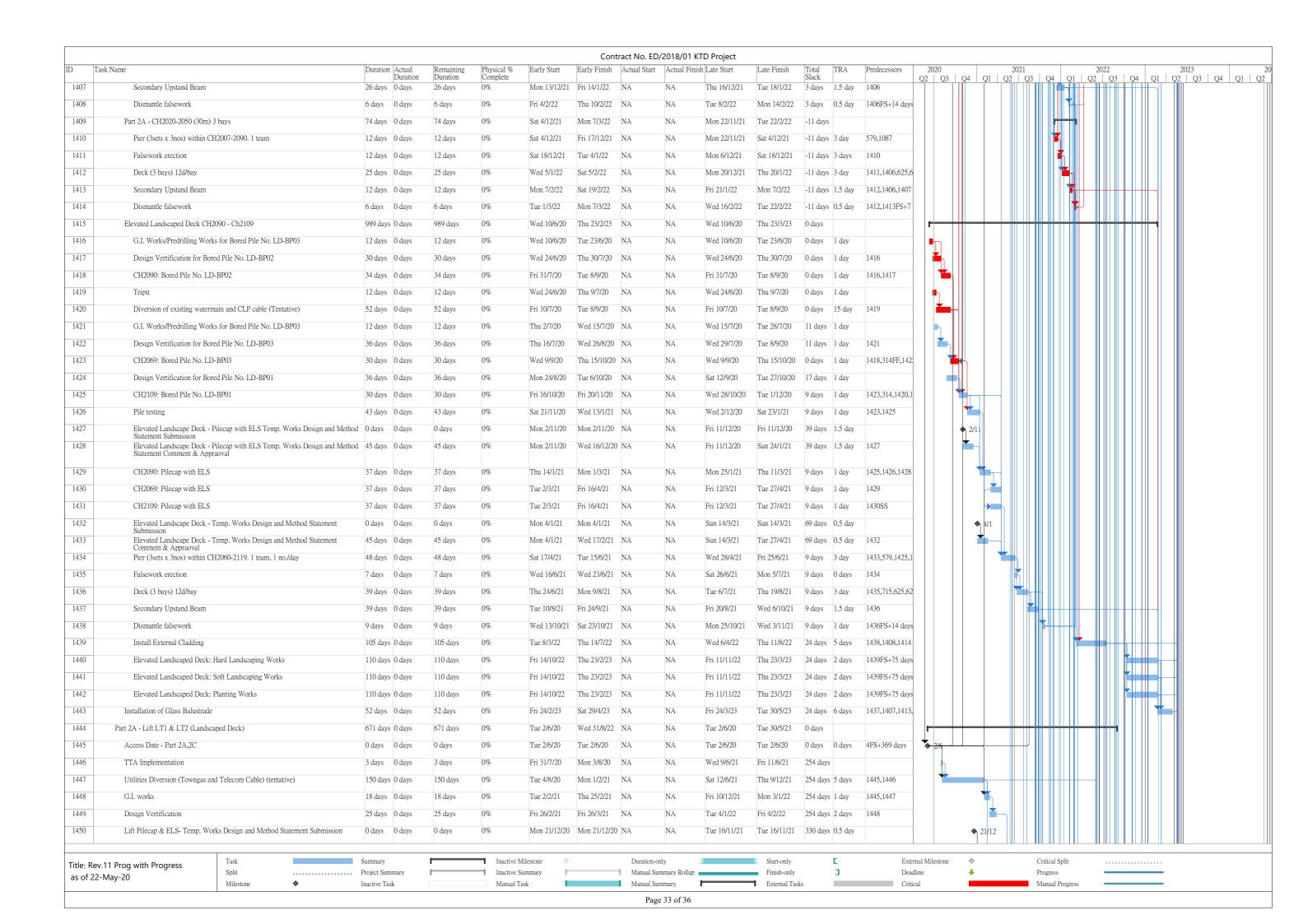
							Con	tract No. ED,	/2016/01 KI	TD Project														
Tasl	k Name	Duration	Actual Duration	Remaining Duration	Physical % Complete	Early Start	Early Finish	Actual Start	Actual Finish	h Late Start	Late Finish	Total Slack	TRA	Predecessors	2020 Q2   Q3	04	202	21 Q3   Q	)4 01	202	22 Q3   Q4	4 01	202   Q2	
183	PMAA Panel Material Comment and Approval by PM	18 days		18 days	0%	Sat 2/5/20	Fri 22/5/20	NA	NA	Sat 6/6/20	Sat 27/6/20	30 days	1 days	1182		74	.   Q2	Z- (	, Q1	1 Q2		, QI	1 42	
184	PMAA Panel Material Coloring Sample Submission	0 days	0 days	0 days	0%	Thu 4/6/20	Thu 4/6/20	NA	NA	Mon 29/6/20	Mon 29/6/20	20 days	1 days	1183	4/6									
185	PMAA Panel Material Coloring Sample Comment and Approval by PM	10 days	0 days	10 days	0%	Thu 4/6/20	Mon 15/6/20	NA	NA	Mon 29/6/20	Fri 10/7/20	20 days	1 days	1184										
186	Material Testing and Offsite Fabrication	247 days	0 days	247 days	0%	Mon 1/6/20	Tue 2/2/21	NA	NA	Wed 10/6/20	Wed 17/2/21	9 days												
187	Holding Down Bolt Procurement	61 days	0 days	61 days	0%	Fri 5/6/20	Tue 4/8/20	NA	NA	Wed 10/6/20	Sun 9/8/20	5 days	1 days											
188	Holding Down Bolt Testing	45 days	0 days	45 days	0%	Wed 5/8/20	Fri 18/9/20	NA	NA	Mon 10/8/20	Wed 23/9/20	5 days	1 day	1187										
189	Structural Steelwork Procurement	81 days		81 days	0%	Mon 1/6/20	Thu 20/8/20	NA	NA	Sat 13/6/20	Tue 1/9/20	12 days	1 day											
190	Structural Steel Frame Material Testing	46 days	_	46 days	0%	Fri 21/8/20	Mon 5/10/20		NA	Wed 2/9/20	Sat 17/10/20	12 days		1189										
191	Structural Steel Frame Fabrication and Delivery	120 days	-	120 days	0%	Tue 6/10/20	Tue 2/2/21		NA	Sun 18/10/20	Sun 14/2/21	12 days		1181,1190										
192	Structural Steel Frame Start Delivery to Stie	0 days		0 days	0%	Wed 25/11/20			NA	Tue 8/12/20	Tue 8/12/20	12 days		1191SS+51 days		25/1								
193	Polymethyl Metharylate (PMMA) and Associated Aluminium Sub-frame	121 days	-	121 days	0%	Tue 16/6/20	Wed 14/10/2		NA	Sat 11/7/20	Sun 8/11/20	25 days		1185		20/1	-							
	Procurement																							
194	Polymethyl Metharylate (PMMA) panel fabrication and delivery	101 days		101 days	0%	Thu 15/10/20			NA	Mon 9/11/20	Wed 17/2/21	25 days	30 days	1193,1181										
195	Temp Works Design for Noise Barrier	106 days	-	106 days	0%	Sat 13/6/20	Mon 19/10/2		NA	Fri 19/6/20	Sat 24/10/20	5 days												
196	ELS Design Preparation for Noise Barrier with ICE	18 days		18 days	0%	Wed 17/6/20	Thu 9/7/20		NA	Tue 23/6/20	Wed 15/7/20	5 days												
197	ELS Design for Noise Barrier Comment by AECOM	21 days	0 days	21 days	0%	Fri 10/7/20	Thu 30/7/20		NA	Thu 16/7/20	Wed 5/8/20	6 days	1 day	1196										
198	Temporary Works Platform Design Preparation	36 days	0 days	36 days	0%	Sat 13/6/20	Mon 27/7/20	NA	NA	Fri 19/6/20	Sat 1/8/20	5 days	1 day											
199	Temporary Working Platform Design Submit for AECOM Comment	19 days	0 days	19 days	0%	Tue 28/7/20	Tue 18/8/20	NA	NA	Mon 3/8/20	Mon 24/8/20	5 days	1 day	1198										
200	Temporary Working Platform Fabrication	51 days	0 days	51 days	0%	Wed 19/8/20	Mon 19/10/2	0 NA	NA	Tue 25/8/20	Sat 24/10/20	5 days	1 day	1199										
201	2.0 Noise Barrier Footing and Modification Existing Column Stud	184 days	2.71 days	181.29 days	0%	Fri 20/3/20	Sat 19/9/20	Fri 20/3/20	NA	Fri 20/3/20	Wed 23/9/20	4 days				<b>1</b>								
202	Take up the Works Area	1 day	1 day	0 days	0%	Fri 20/3/20	Fri 20/3/20	Fri 20/3/20	Fri 20/3/20	Fri 20/3/20	Fri 20/3/20	0 days												
203	Ground Investigation Works	25 days	0 days	25 days	0%	Sat 4/7/20	Sat 1/8/20	NA	NA	Wed 8/7/20	Wed 5/8/20	3 days	1 day	1176										
204	Diversion of Existing Utilities and ELS Construction	42 days	0 days	42 days	0%	Mon 3/8/20	Sat 19/9/20	NA	NA	Thu 6/8/20	Wed 23/9/20	3 days	1 day	1197,1203										
205	Fooing with Column Stud Construction	61 days	0 days	61 days	0%	Wed 23/9/20	Sat 5/12/20	NA	NA	Thu 24/9/20	Mon 7/12/20	1 day												
206	Bay 1 & 3 Fooing with Column Stud and Modification of Existing Column Stud	10 days	0 days	10 days	0%	Wed 23/9/20	Tue 6/10/20	NA	NA	Thu 24/9/20	Wed 7/10/20	1 day	1 day	1188,1204,184FI										
207	along Bay 1 & 3  Bay 2 & 4 Fooing with Column Stud and Modification of Existing Column along	10 days	0 days	10 days	0%	Wed 7/10/20	Sat 17/10/20	NA	NA	Thu 8/10/20	Mon 19/10/20	1 day	1 day	1206										
208	Bay 2&4  Bay 5 & 7 Fooing with Column Stud, Modification of Existing Stud along Bay 5&7		-	10 days	0%		Fri 30/10/20		NA	Tue 20/10/20	Sat 31/10/20		1 day	1207										
209	Bay 6 Fooing with Column Stud, Modification of Existing Stud along Bay 6	10 days		10 days	0%	Sat 31/10/20	Wed 11/11/2		NA	Mon 2/11/20	Thu 12/11/20		1 day	1208										
210	Backfill and extract sheet pile	21 days		21 days	0%	Thu 12/11/20			NA	Fri 13/11/20	Mon 7/12/20	1 day	1 day	1209										
211	Modification of Remaining Colum Stud	50 days		50 days	0%	Mon 7/12/20		NA	NA	Tue 8/12/20	Sat 6/2/21	1 day	_	1207										
212	Modification of Remaining Column Stud	50 days		50 days	0%	Mon 7/12/20		NA NA	NA NA	Tue 8/12/20	Sat 6/2/21		1 day	1210,1178										
						Wed 19/8/20								1210,1170										
213	Noise Barrier Installation	258 days		258 days	0%			NA	NA	Sat 26/9/20	Mon 5/7/21	1	1 day	1100										
214	CNP Application	31 days		31 days	0%	Wed 19/8/20			NA	Sat 26/9/20	Mon 26/10/20			1199										
215	Temporary Platform Delivery to Site	0 days		0 days	0%		Mon 19/10/2		NA	Tue 27/10/20	Tue 27/10/20		0.5 day			19/10								
216	Temporary Platform On-site Assembly (Night Time)	36 days		36 days	0%		Tue 1/12/20		NA	Tue 27/10/20	Mon 7/12/20	5 days		1214,1215										
217	Structural Steel Frame Installation	119 days		119 days	0%	Mon 7/12/20	Wed 5/5/21		NA	Tue 8/12/20	Thu 6/5/21		1 day	1192,1212SS,12										
218	PMMA and Associated Aluminum Sub-frame Installation	117 days	0 days	117 days	0%	Fri 8/1/21	Wed 2/6/21	NA	NA	Sat 9/1/21	Thu 3/6/21	1 day	1 day	1194SS+50 days										
219	Lighting Installation	25 days	0 days	25 days	0%	Thu 3/6/21	Sat 3/7/21	NA	NA	Fri 4/6/21	Mon 5/7/21	1 day	1 day	1218FF+25 days				4						
220	Rainwater downpipe	25 days	0 days	25 days	0%	Thu 3/6/21	Sat 3/7/21	NA	NA	Fri 4/6/21	Mon 5/7/21	1 day	1 day	1218FF+25 days										
221	Bus Lay-by	25 days	0 days	25 days	0%	Thu 3/6/21	Sat 3/7/21	NA	NA	Fri 4/6/21	Mon 5/7/21	1 day		1218FF+25 days										
222	Planned Completion for Section 5 & Section 9	0 days	0 days	0 days	0%	Sat 3/7/21	Sat 3/7/21	NA	NA	Mon 5/7/21	Mon 5/7/21	1 day	0 days	1218,1219,1220,				3/7						
223	Section 6	1201 day	/s 8.73 days	1192.27 days?	0%	Thu 16/5/19	Tue 30/5/23	Thu 16/5/19	NA	Thu 16/5/19	Wed 29/5/24	298 da		-										
224	Fencing (15m/d) & Hoarding Erection (10m/d)	915 days	185.72 days	729.28 days	0%	Tue 15/10/19	Thu 10/11/22	2 Tue 15/10/19	NA	Tue 15/10/19	Fri 30/12/22	42 days		-										
225	Hoarding - Part 1 (~57m)	51 days	0 days	51 days	0%	Tue 1/12/20	Mon 1/2/21	NA	NA	Wed 21/9/22	Mon 21/11/22	536 days	1 day	121,8										
226	Fencing - Part 1 (758m)	6 days	0 days	6 days	0%	Sat 19/9/20	Fri 25/9/20	NA	NA	Mon 1/3/21	Sat 6/3/21	130 days	0 days	121,8		₩₩₩								
227	Fencing - Part 2A (~458m) - 4 team	12 days		12 days	0%	Wed 3/2/21	Fri 19/2/21	NA	NA	Sat 5/2/22	Fri 18/2/22	296 days	1 days	9,121,1147,1445		$\parallel \parallel \parallel \parallel$								
															11.67	<u>        <del>1</del></u>			<u>                                      </u>					_
	I I Prog with Progress	Summary Project Sun	nmary		■ Inactive Mil ■ Inactive Sur			Duration-or  Manual Sur	nly Ummary Rollup		Start-only Finish-only		C 3	Externa Deadlin	il Milestone ne	<ul><li>*</li></ul>		Criti Prog	cal Split ress					
s of 22-N	May-20 Milestone ◆	Inactive Ta			Manual Tasi			Manual Su			External Tas	alea	_	Critical		-			ual Progress				_	



							Con	tract No. ED,	/2018/01 K	TD Project												
Task Na	Vame	Duration	Actual Duration	Remaining Duration	Physical % Complete	Early Start	Early Finish	Actual Start	Actual Finis	h Late Start	Late Finish	Total TRA Slack		2020	Q4 Q1	2021	03   0	04		2022 2   Q3	04	O1
272	CH2000 - CH2060 (~84m, 2 M/H) - S.D. Rd	14 days		14 days	0%	Thu 6/1/22	Fri 21/1/22	NA	NA	Mon 5/9/22	Wed 21/9/22	198 days 1 days	1085SS+12 days	2 03	V1 VI	1 22					\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Q1
73	CH2060 - CH2118.93 (~50.7m, 2 M/H) - Rd D3	14 days	0 days	14 days	0%	Mon 4/10/21	Wed 20/10/21	NA	NA	Fri 3/12/21	Sat 18/12/21	51 days 1 days	1267									
'4	CH100 - CH147 (~169m, 5 M/H) - L12 Road	38 days	0 days	38 days	0%	Mon 2/5/22	Wed 15/6/22	NA	NA	Sat 2/7/22	Mon 15/8/22	51 days 3 days	1275,1229									
75	Open Space & Promenade (~457m, 11 M/H)	76 days	0 days	76 days	0%	Tue 25/1/22	Sat 30/4/22	NA	NA	Tue 29/3/22	Thu 30/6/22	51 days 6 days	1504,458,459,12						4	4 III II		
6	L12d Stormwater	50 days	0 days	50 days	0%	Thu 21/10/21	Fri 17/12/21	NA	NA	Wed 26/1/22	Mon 28/3/22	80 days	1273,490				Th.			41111		
17	Sewerage Drainage	496 days	0 days	496 days	0%	Tue 1/12/20	Wed 3/8/22	NA	NA	Sat 29/5/21	Wed 5/10/22	51 days								<del>                                     </del>		
278	Procurement of Sewerage Pipes	90 days	0 days	90 days	0%	Tue 1/12/20	Sun 28/2/21	NA	NA	Sat 29/5/21	Thu 26/8/21	179 days 0.5 days										
79	Sewerage Drainage - Temp. Works Design and Method Statement Submission	0 days	0 days	0 days	0%	Wed 2/6/21	Wed 2/6/21	NA	NA	Sat 28/8/21	Sat 28/8/21	87 days 0.5 days				<b>4</b> 2/	6					
80	Sewerage Drainage - Temp. Works Design and Method Statement Comment &	21 days	0 days	21 days	0%	Wed 2/6/21	Tue 22/6/21	NA	NA	Sat 28/8/21	Fri 17/9/21	87 days 0.5 days	1279									
1	Appraoval CH1000 - CH1087 (~68m, 3 M/H)	19 days	0 days	19 days	0%	Tue 15/6/21	Wed 7/7/21	NA	NA	Fri 27/8/21	Fri 17/9/21	62 days 1 days	428,451,465,466									
32	CH1087 - CH1189.4 (~47m, 1 no M/H)	14 days	0 days	14 days	0%	Sat 4/9/21	Mon 20/9/21	NA	NA	Sat 18/9/21	Wed 6/10/21	12 days 1 days	1265,1278,1280,									
83	CH100 - CH147 (~156m, 6 M/H) - L12 Road	41 days		41 days	0%	Thu 16/6/22	Wed 3/8/22	NA	NA	Tue 16/8/22	Wed 5/10/22	51 days 3 days	1274,1280,1275,									
	Underground Watermain	629 days		629 days	0%	Tue 15/12/20	Fri 27/1/23		NA	Fri 14/5/21	Thu 16/3/23	41 days	127 1,1200,1273,									4
285	Fresh Watermain	519 days		519 days	0%	Tue 15/12/20	Wed 14/9/22		NA	Fri 14/5/21	Thu 16/3/23	119 days							Щ			
286	Fresh Watermain - Method Statement Submission	0 days		0 days	0%	Tue 1/6/21	Tue 1/6/21		NA NA	Sat 7/8/21	Sat 7/8/21	67 days 1 days				1 //	5			/        <sup>*</sup>		
287	Fresh Watermain - Ivietnod Statement Submission  Fresh Watermain Method Statement Comment & Appraoval												1286				y					
88	**	35 days		35 days	0%	Tue 1/6/21	Mon 5/7/21		NA	Sat 7/8/21	Fri 10/9/21	67 days 1 days	1286									
	Fresh Watermain Procurement	120 days		120 days	0%	Mon 11/1/21	Mon 10/5/21		NA	Fri 14/5/21	Fri 10/9/21	123 days 1 days	1200 1207									
89	CH1000 - CH1087 (~191m) Rd D3	20 days		20 days	0%	Tue 6/7/21	Wed 28/7/21		NA	Sat 11/9/21	Wed 6/10/21	58 days 1 days	1288,1287									
90	CH1087 - CH1189.4 (~212m) - N. Ramp	4 days		4 days	0%	Tue 21/9/21	Sat 25/9/21		NA	Thu 7/10/21	Mon 11/10/21		1282,467,1289									
91	CH1189.4 - CH1394 (~409.2m) - Bridge D3	42 days	-	42 days	0%	Tue 10/8/21	Tue 28/9/21		NA	Fri 15/10/21	Thu 2/12/21	54 days 2 days	1288,944FF									
2	CH1394 - CH1444.7 (~101.4m) - S. Ramp	10 days	0 days	10 days	0%	Tue 6/7/21		NA	NA	Mon 15/8/22	Thu 25/8/22	332 days 0 days	988SS+10 days,									
3	CH1444.7 - CH1560 (~165m) - Rd D3	30 days	0 days	30 days	0%	Mon 12/7/21	Sat 14/8/21		NA	Sat 27/11/21	Tue 4/1/22	116 days 0 days	988SS+15 days									
	CH1720 - CH1920 (~25m) - Underpass	2 days	0 days	2 days	0%	Fri 17/12/21	Sat 18/12/21	NA	NA	Fri 16/9/22	Sat 17/9/22	221 days 0 days	1270,444									
	CH2060 - CH2118.93 (~47m) - Rd D3	2 days	0 days	2 days	0%	Sat 16/10/21	Mon 18/10/21	NA	NA	Wed 15/12/21	Thu 16/12/21	51 days 0 days	1273SS+10 days									
	CH100 - CH147 (~280m) - L12 Road	30 days	0 days	30 days	0%	Tue 17/5/22	Tue 21/6/22	NA	NA	Tue 28/6/22	Tue 2/8/22	35 days 2 days	1297									
	Open Space & Promenade (~1,093m)	110 days	0 days	110 days	0%	Thu 30/12/21	Mon 16/5/22	NA	NA	Wed 12/1/22	Fri 27/5/22	10 days 1 day	1497,458,111									
	Freshwater main across Kai Tak River	50 days	0 days	50 days	0%	Tue 17/5/22	Fri 15/7/22	NA	NA	Tue 15/11/22	Thu 12/1/23	151 days 1 day	1297,514						#			
)	L12d Freshwater	50 days	0 days	50 days	0%	Tue 15/12/20	Wed 17/2/21	NA	NA	Tue 15/11/22	Thu 12/1/23	569 days	498						++			
)	Fresh Watermain T&C	51 days	0 days	51 days	0%	Sat 16/7/22	Wed 14/9/22	NA	NA	Fri 13/1/23	Thu 16/3/23	151 days 1 day	1297,1296,1298,								++++	#
1	Salt Watermain	591 days	0 days	591 days	0%	Mon 1/2/21	Fri 27/1/23	NA	NA	Sun 20/6/21	Thu 16/3/23	41 days			+							1
)2	Salt Watermain - Method Statement Submission	0 days	0 days	0 days	0%	Mon 24/5/21	Mon 24/5/21	NA	NA	Mon 13/9/21	Mon 13/9/21	112 days 1 day				<b>4</b> 24/	15					
)3	Salt Watermain Method Statement Comment & Appraoval	35 days	0 days	35 days	0%	Mon 24/5/21	Sun 27/6/21	NA	NA	Mon 13/9/21	Sun 17/10/21	112 days 1 day	1302									
04	Salt Watermain Procurement	120 days	0 days	120 days	0%	Mon 1/2/21	Mon 31/5/21	NA	NA	Sun 20/6/21	Sun 17/10/21	139 days 1 day										
)5	CH1000 - CH1087 (~157m) Rd D3	15 days	0 days	15 days	0%	Mon 28/6/21	Thu 15/7/21	NA	NA	Thu 18/8/22	Sat 3/9/22	341 days 1 days	1304,1303									
06	CH1087 - CH1189.4 (~218m) - N. Ramp	4 days	0 days	4 days	0%	Mon 27/9/21	Thu 30/9/21	NA	NA	Tue 12/10/21	Sat 16/10/21	12 days 1 day	1290									
07	CH1189.4 - CH1394 (~409.2m) - Bridge D3	40 days	0 days	40 days	0%	Sat 2/10/21	Thu 18/11/21	NA	NA	Mon 18/10/21	Thu 2/12/21	12 days 0.5 days	1291SS,1303,45									
808	CH1394 - CH1444.7 (~101.4m) - S. Ramp	10 days	0 days	10 days	0%	Sat 17/7/21	Wed 28/7/21	NA	NA	Fri 26/8/22	Tue 6/9/22	332 days 1 day	1292				i III					
09	CH1444.7 - CH1560 (~165m) - Rd D3	18 days		18 days	0%	Mon 16/8/21	Sat 4/9/21		NA	Wed 29/6/22	Wed 20/7/22	258 days 1 day	1293									
10	CH1560 - CH1720 (~160m) - NDR	50 days		50 days	0%	Fri 19/11/21	Wed 19/1/22		NA	Thu 21/7/22	Sat 17/9/22	197 days	1307,1309,444									
1	CH1720 - CH1920 (~25m) - Underpass	3 days		3 days	0%	Thu 20/1/22	Sat 22/1/22		NA	Mon 19/9/22	Wed 21/9/22	197 days 1 day	1294,1310						$\  \  \ $			
2	CH2060 - CH2118.93 (~47m) - Rd D3	2 days		2 days	0%	Mon 24/1/22	Tue 25/1/22		NA	Thu 22/9/22	Fri 23/9/22	197 days 0 days	1294,1310									
13	CH100 - CH147 (~455m) - L12 Road	47 days		2 days 47 days	0%		Tue 16/8/22		NA	Wed 3/8/22	Tue 27/9/22	35 days 2 days	1295,1311									
14	L12d Salt Watermain			50 days	0%				NA NA				1313,498								$\  \  \  \ $	
		50 days				Wed 17/8/22	Mon 17/10/22			Wed 16/11/22	Fri 13/1/23	75 days 1 day	,									
315	Open Space & Promenade (~1,093m)	110 days		110 days	0%	Tue 17/5/22	Sat 24/9/22		NA	Sat 28/5/22	Sat 8/10/22	10 days 1 day	1297,458									
316	Saltwater main across Kai Tak River	51 days	U days	51 days	0%	Mon 26/9/22	Fn 25/11/22	NA	NA	Tue 15/11/22	Fri 13/1/23	41 days 1 day	1315,514									Ш
le: Rev.11	Prog with Progress	Summary			Inactive M			Duration-or	-		Start-only	<u> </u>		Milestone	<b>♦</b>			ical Split				
of 22-May	Colit	Project Sun	nmary		Inactive S	ummary 📗		Manual Sur	nmary Rollup		Finish-only	3	Deadline		-		Prog	gress				_

							Con	itract No. ED	/2018/01 K	TD Project											
Task N	Name	Duration	n Actual Duration	Remaining Duration	Physical % Complete	Early Start	Early Finish	Actual Start	Actual Fini	sh Late Start	Late Finish	Total TRA Slack	Predecessors 2020	04 0:	20′	)21	04 0.		)22	04	\1
17	Salt Watermain T&C	50 days	0 days	50 days	0%	Sat 26/11/22	Fri 27/1/23	NA	NA	Sat 14/1/23	Thu 16/3/23	41 days 1 day	Q2 Q3   1312,1315,1316,	Q4   Q1	Q2	Q3 (	24   Q1	Q2	Q3	Q4 Q1	1 (
8	Irrigation System	535 days	s 0 days	535 days	0%	Tue 5/1/21	Sat 22/10/22	NA	NA	Wed 16/6/21	Thu 16/3/23	120 days								.	
19	Irrigation System - Method Statement Submission	0 days	0 days	0 days	0%	Sun 20/6/21	Sun 20/6/21	NA	NA	Thu 4/11/21	Thu 4/11/21	137 days 1 day				20/6					
20	Irrigation System Method Statement Comment & Appraoval	21 days	0 days	21 days	0%	Sun 20/6/21	Sat 10/7/21	NA	NA	Thu 4/11/21	Wed 24/11/21	137 days 1 day	1319								
1	Irrigation Pipe and System Procurement	150 days	s 0 days	150 days	0%	Tue 5/1/21	Thu 3/6/21	NA	NA	Wed 16/6/21	Fri 12/11/21	162 days 1 day									
22	CH1000 - CH1087 (~87m) Rd D3	5 days	0 days	5 days	0%	Fri 16/7/21	Wed 21/7/21	NA	NA	Mon 5/9/22	Fri 9/9/22	341 days 0 days	1305,1321		,						
3	CH1087 - CH1189.4 (~205m) - N. Ramp		0 days	10 days	0%	Mon 7/6/21	Fri 18/6/21	NA	NA	Sat 13/11/21	Wed 24/11/21	132 days 1 day	1321			, ]					
4	CH1189.4 - CH1394 (~409.2m) - Bridge D3		0 days	7 days	0%	Sat 2/10/21	Sat 9/10/21	NA	NA	Thu 25/11/21	Thu 2/12/21	45 days 0 days	1307SS,1320,13								
5	CH1394 - CH1444.7 (~101.4m) - S. Ramp	3 days	0 days	3 days	0%	Thu 29/7/21	Sat 31/7/21	NA	NA	Wed 7/9/22	Fri 9/9/22	332 days 0 days	1308								
5	CH1444.7 - CH1560 (~175m) - Rd D3	4 days	0 days	4 days	0%	Mon 6/9/21			NA	Mon 12/9/22	Thu 15/9/22	302 days 0 days	1309,1322,1325								
7	CH1920 - CH2000 (~160m) S.D. Rd		0 days	5 days	0%	Thu 6/1/22	Tue 11/1/22		NA	Fri 16/9/22	Wed 21/9/22	207 days 1 day	1271,1326			.    1   '					
	· ´																				
28	CH2000 - CH2060 (~60m) - S.D. Rd		0 days	2 days	0%	Sat 22/1/22	Mon 24/1/22		NA	Thu 22/9/22	Fri 23/9/22	198 days 0 days	1272,1327								
29	CH2060 - CH2118.93 (~100m) - Rd D3	3 days	0 days	3 days	0%	Wed 26/1/22	Fri 28/1/22		NA	Sat 24/9/22	Tue 27/9/22	197 days 0 days	1312,1328								
30	CH100 - CH147 (~173m) - L12 Road	5 days	0 days	5 days	0%	Wed 17/8/22	Mon 22/8/22		NA	Wed 28/9/22	Wed 5/10/22	35 days 1 day	1313,1329								
31	Irrigation System T&C		0 days	50 days	0%	Tue 23/8/22	Sat 22/10/22		NA	Sat 14/1/23	Thu 16/3/23	120 days 1 day	1330								#
2	Salt Water and Sewage Pumping Station		s 0 days	637 days	0%	Sat 27/3/21	Thu 18/5/23		NA	Wed 28/7/21	Tue 30/5/23	8 days									
3	Salt Water Pumping Station - Temp. Works Design and Method Statement Submission	0 days	0 days	0 days	0%	Mon 2/8/21	Mon 2/8/21	NA	NA	Fri 10/9/21	Fri 10/9/21	39 days 1 day				2/8					
34	Salt Water Pumping Station - Temp. Works Design and Method Statement Comme & Appraoval	nt 35 days	0 days	35 days	0%	Mon 2/8/21	Sun 5/9/21	NA	NA	Fri 10/9/21	Thu 14/10/21		1333								
5	Utilities Diversion	65 days	0 days	65 days	0%	Mon 21/6/21	Sat 4/9/21	NA	NA	Wed 28/7/21	Wed 13/10/21	31 days 15 day									
6	Substructure	100 days	s 0 days	100 days	0%	Tue 5/10/21	Sat 5/2/22	NA	NA	Fri 15/10/21	Tue 15/2/22	8 days				,    <b>   </b>					
7	Sheetpile Installation	25 days	0 days	25 days	0%	Tue 5/10/21	Wed 3/11/21	NA	NA	Fri 15/10/21	Fri 12/11/21	8 days 5 days	148,1334,1335,1								
8	Excavation and Shoring Installation	50 days	0 days	50 days	0%	Thu 4/11/21	Tue 4/1/22	NA	NA	Sat 13/11/21	Thu 13/1/22	8 days 5 days	1337			,    <b>     </b>					
)	Base Slab Construction include blinding layer	25 days	0 days	25 days	0%	Wed 5/1/22	Sat 5/2/22	NA	NA	Fri 14/1/22	Tue 15/2/22	8 days 3 days	1338,149FS+120								
	Superstructure	460 days	s 0 days	460 days	0%	Fri 24/9/21	Wed 12/4/23	NA	NA	Wed 16/2/22	Mon 29/5/23	38 days						+++++			#1
	Coordination with CLP to plan for Layout and Details of Transformer Room	0 days	0 days	0 days	0%	Fri 24/9/21	Fri 24/9/21	NA	NA	Sat 4/6/22	Sat 4/6/22	253 days				<b>→</b> 2	#/)	+			
	Scaflold, Falsework and Formwork Erection	28 days	0 days	28 days	0%	Mon 7/2/22	Thu 10/3/22	NA	NA	Wed 16/2/22	Sat 19/3/22	8 days 2 days	1339,719,531,54					<b>    </b>			
	Wall Rebar Fixing & Concreting	24 days	0 days	24 days	0%	Fri 11/3/22	Fri 8/4/22	NA	NA	Mon 21/3/22	Thu 21/4/22	8 days 1 day	1342								
4	Top Slab and Beam: Rebar Fixing and Formwork	36 days	0 days	36 days	0%	Sat 9/4/22	Tue 24/5/22	NA	NA	Fri 22/4/22	Thu 2/6/22	8 days 2 days	1343								
5	Formwork & Falsework Removal	28 days	0 days	28 days	0%	Wed 25/5/22	Mon 27/6/22	NA	NA	Sat 4/6/22	Thu 7/7/22	8 days 1 day	1344,1341								
16	Watertightnes Test	15 days	0 days	15 days	0%	Tue 28/6/22	Fri 15/7/22	NA	NA	Fri 19/8/22	Mon 5/9/22	44 days 1 day	1345								
47	Backfilling & Sheetpile Removal	24 days	0 days	24 days	0%	Tue 28/6/22	Tue 26/7/22	NA	NA	Tue 9/8/22	Mon 5/9/22	35 days 2 days	1345								
48	Water Chamber Construction		0 days	36 days	0%	Tue 28/6/22	Tue 9/8/22		NA	Fri 8/7/22	Thu 18/8/22	8 days 1 day	1345								
49	Watertightnes Test for Water Chamber		0 days	15 days	0%		Fri 26/8/22		NA	Fri 19/8/22	Mon 5/9/22	8 days 1 day	1348								
50	Drainage and Roadworks		0 days	80 days	0%	Wed 27/7/22	Mon 31/10/2		NA	Sat 18/2/23	Mon 29/5/23	170 days 5 days	1347,383								
51	Utilities Laying		s 0 days	105 days	0%	Wed 27/7/22	Tue 29/11/22		NA	Tue 6/9/22	Tue 10/1/23	35 days 5 days	1347							ШШ '	
52	Finishing work and fitting out	75 days		75 days	0%	Sat 27/8/22	Fri 25/11/22		NA	Tue 6/9/22	Mon 5/12/22	8 days 1 day	714,1345,555,13								
																					.]]
53	Tx Installation with T&C		0 days	60 days	0%	Tue 15/11/22			NA	Thu 24/11/22	Mon 6/2/23	8 days 1 day	1346,1352FF+50								
54	PCCW Installation	15 days		15 days	0%	Wed 30/11/22			NA	Fri 24/2/23		70 days 1 day	1351,1346								
55	Ironmongery work		0 days	24 days	0%	Sat 26/11/22			NA	Tue 14/2/23	Mon 13/3/23	64 days 0.5 days								<u> </u>	
56	E&M installation		s 0 days	100 days	0%	Thu 3/11/22	Fri 3/3/23		NA	Sat 12/11/22	Mon 13/3/23	8 days 5 days	1345,1353FF+30								1
7	Testing and Commissioning	30 days	0 days	30 days	0%	Sat 4/3/23	Wed 12/4/23	NA	NA	Tue 14/3/23	Fri 21/4/23	8 days 2 days	1356,1355,1351,								
8	WSD Form 46 Part I & II Submission	0 days	0 days	0 days	0%	Sat 27/3/21	Sat 27/3/21	NA	NA	Sat 22/4/23	Sat 22/4/23	615 days 0.5 days			<b>♦</b> 27/3						
59	WSD Form 46 Part 46 Part IV Submission	0 days	0 days	0 days	0%	Tue 15/3/22	Tue 15/3/22	NA	NA	Sat 22/4/23	Sat 22/4/23	329 days 0.5 days	1358					15/3			#1
60	CLP Meter Installation	0 days	0 days	0 days	0%	Sun 19/6/22	Sun 19/6/22	NA	NA	Sat 22/4/23	Sat 22/4/23	251 days 0.5 days							19/6		#1
61	FSD Form 501 Submission for FS Inspection	0 days	0 days	0 days	0%	Wed 12/4/23	Wed 12/4/23	NA	NA	Sat 22/4/23	Sat 22/4/23	8 days 0.5 days	1359,1360,1357								*
o. Do: 11	Prograith Progress Task	Summary			Inactive M	lilestone 🔷		Duration-c	nly		Start-only	Е	External Milestone	**		Crit	ical Split		<u> </u>		
z; κev.Tl	Prog with Progress	Project Sur	nmary		Inactive Su				mmary Rollup		Finish-only	3	Deadline	4			gress				_

								tract No. ED,			-												
	k Name	Duration	Actual Duration	Remaining Duration	Physical % Complete	Early Start		Actual Start	Actual Finish	Late Start	Late Finish	Total Slack	TRA	Predecessors	2020 Q2   Q3   0	Q4 Q1	202   Q2	21 Q3	Q4	Q1 C	2022 Q2   Q3	3   Q4	Q1
2	FSD Inspection	0 days	0 days	0 days	0%	Sat 29/4/23	Sat 29/4/23	NA	NA	Thu 11/5/23	Thu 11/5/23	8 days	0.5 days	1361FS+15 days									
3	Issuance of FS Certificate	0 days	0 days	0 days	0%	Thu 18/5/23	Thu 18/5/23	NA	NA	Tue 30/5/23	Tue 30/5/23	8 days	0.5 days	1362FS+15 days									
4	Salt Water and Sewage Pumping Station: Landscaping hardworks and softworks	110 days	s 0 days	110 days	0%	Wed 30/11/22	Sat 15/4/23	NA	NA	Wed 11/1/23	Mon 29/5/23	35 days	2 days	562,1351,548									
5	Salt Water and Sewage Pumping Station: Planting Works	110 days	s 0 days	110 days	0%	Wed 30/11/22	Sat 15/4/23	NA	NA	Wed 11/1/23	Mon 29/5/23	35 days	2 days	562,1351,548									+++
6	Section 6 Completion	0 days	0 days	0 days	0%	Tue 30/5/23	Tue 30/5/23	NA	NA	Tue 30/5/23	Tue 30/5/23	0 days		1350,1363,1364,									
7	Seawater Intake Box Culvert (~169m)	647 days	s 0 days	647 days	0%	Fri 5/3/21	Mon 8/5/23	NA	NA	Fri 5/3/21	Tue 30/5/23	0 days				-							+
8	Access Date - Part 4	0 days	0 days	0 days	0%	Fri 5/3/21	Fri 5/3/21	NA	NA	Fri 5/3/21	Fri 5/3/21	0 days	0 days	4FS+645 days		<b>*</b>	5/3						
9	Part 4 - CHA.0-79 (79m)	290 days	s 0 days	290 days	0%	Thu 19/5/22	Mon 8/5/23	NA	NA	Fri 10/6/22	Tue 30/5/23	18 days											+
0	CHA 0-24 Precast Section	34 days	0 days	34 days	0%	Thu 19/5/22	Tue 28/6/22	NA	NA	Fri 10/6/22	Wed 20/7/22	18 days											
1	Temporary ELS & Excavation and Shoring Installation	24 days	0 days	24 days	0%	Thu 19/5/22	Thu 16/6/22	NA	NA	Fri 10/6/22	Fri 8/7/22	18 days	1 days	1384,1386,1238,									
2	Install 3 nos. 8 m long precast units (2.5 days per unit)	10 days	0 days	10 days	0%	Fri 17/6/22	Tue 28/6/22	NA	NA	Sat 9/7/22	Wed 20/7/22	18 days	2.5 days	1371									
3	CHA 24-79 (75m) (5 units)	256 days	s 0 days	256 days	0%	Wed 29/6/22	Mon 8/5/23	NA	NA	Thu 21/7/22	Tue 30/5/23	18 days											##
1	Temporary ELS & Excavation		0 days	50 days	0%	Wed 29/6/22	Fri 26/8/22		NA	Thu 21/7/22	Sat 17/9/22	18 days	1 day	1372									
5	Unit 1 & 3 (41 days per unit)		0 days	44 days	0%	Sat 27/8/22	Thu 20/10/22		NA	Mon 19/9/22	Thu 10/11/22			1374									
6	Unit 2 & 4 (41 days per unit)		0 days	44 days	0%	Fri 21/10/22	Sat 10/12/22		NA	Fri 11/11/22	Mon 2/1/23			1375									$\parallel \parallel$
7	Unit 5 & 6 (41 days per unit)				0%	Mon 12/12/22		NA	NA	Tue 3/1/23	Sat 25/2/23			1376									
3			0 days	44 days								18 days											
	Remove struts and backfilling		0 days	24 days	0%	Mon 6/2/23	Sat 4/3/23	NA	NA	Mon 27/2/23	Sat 25/3/23	18 days		1376,1377									
9	Reinstate seawall		0 days	50 days	0%	Mon 6/3/23	Mon 8/5/23		NA	Mon 27/3/23	Tue 30/5/23		1 days	1378									
0	Part 10 - CHA79-89 (10m)		s 0 days	286 days	0%	Wed 2/6/21	Wed 18/5/22		NA	Wed 2/6/21	Thu 9/6/22	0 days									1		
	Access Date - Part 10	0 days	0 days	0 days	0%	Wed 2/6/21	Wed 2/6/21	NA	NA	Wed 2/6/21	Wed 2/6/21	0 days	0 days	4FS+734 days,1'			2/	/6					
2	Tempoary Works Design and Method Statement Submission	0 days	0 days	0 days	0%	Sun 2/1/22	Sun 2/1/22	NA	NA	Tue 22/2/22	Tue 22/2/22	40 days							•	2/1			
	Tempoary Works Design and Method Statement Comment by PM	21 days	0 days	21 days	0%	Mon 3/1/22	Wed 26/1/22	NA	NA	Tue 22/2/22	Thu 17/3/22	40 days		1382									
	Temporary ELS & Excavation	14 days	0 days	14 days	0%	Fri 25/2/22	Sat 12/3/22	NA	NA	Fri 18/3/22	Sat 2/4/22	18 days	0 days	1388,1381,1391,							-		
	Box Culvert with Feeder Installation	47 days	0 days	47 days	0%	Mon 14/3/22	Wed 11/5/22	NA	NA	Mon 4/4/22	Wed 1/6/22	18 days	6 days	1384,1381,1391							ь		
	Remove struts and backfilling	6 days	0 days	6 days	0%	Thu 12/5/22	Wed 18/5/22	NA	NA	Thu 2/6/22	Thu 9/6/22	18 days	1 days	1392,1385							#    <sup> </sup>		
	Part 1 - CH89-165 (76m) 6 Units	193 days	s 0 days	193 days	0%	Mon 16/8/21	Fri 8/4/22	NA	NA	Mon 6/9/21	Wed 1/6/22	18 days						-			ا       لا		
	Temporary ELS & Excavation	25 days	0 days	25 days	0%	Mon 16/8/21	Mon 13/9/21	NA	NA	Mon 6/9/21	Wed 6/10/21	18 days	0.5 days	9,1147,1445									
	Unit 1 & 3 (41 days per unit)	44 days	0 days	44 days	0%	Tue 14/9/21	Sat 6/11/21	NA	NA	Thu 7/10/21	Sat 27/11/21	18 days	4 days	1388,418,570					H				
)	Unit 2 & 4 (41 days per unit)	44 days	0 days	44 days	0%	Mon 8/11/21	Thu 30/12/21	NA	NA	Mon 29/11/21	Fri 21/1/22	18 days	4 days	1389					<b>H</b>	_			
	Unit 5 & 6 (41 days per unit)	44 days	0 days	44 days	0%	Fri 31/12/21	Thu 24/2/22	NA	NA	Sat 22/1/22	Thu 17/3/22	18 days	4 days	1390									
2	Remove struts and backfilling	36 days	0 days	36 days	0%	Fri 25/2/22	Fri 8/4/22	NA	NA	Thu 21/4/22	Wed 1/6/22	43 days	1 days	1390,1391							J <b>     </b>		
3	Elevated Landscape Deck CH1920 - 2090	1178 day	ys 11.27 days	1166.74 days?	0%	Thu 16/5/19	Sat 29/4/23	Thu 16/5/19	NA	Thu 16/5/19	Wed 29/5/24	321 da											##
4	Agree Interface Coordination Plan with KL/2014/01 Contractor		14 days	0 days	100%	Thu 16/5/19	Fri 31/5/19	Thu 16/5/19		Thu 16/5/19	Fri 31/5/19	0 days											
5	Ch1920-CH2060		0 days	1 day?	0%	Sat 23/5/20	Sat 23/5/20		NA	Wed 29/5/24	Wed 29/5/24	1467 d	-										
6	Part 1 - CH1919-2020 (70m) 4 bays		s 0 days	181 days	0%	Mon 5/7/21	Thu 10/2/22		NA	Wed 8/9/21	Mon 14/2/22	3 days								4111			
7	Pier Temporary Works Design and Method Statement Submission	0 days		0 days	0%	Mon 5/7/21	Mon 5/7/21		NA	Wed 8/9/21	Wed 8/9/21	65 days	1 day					s 5/7					
														1207									
9	Pier Temporary Works Design and Method Statement Comment & Approval	45 days		45 days	0%	Mon 5/7/21	Wed 18/8/21		NA	Wed 8/9/21	Fri 22/10/21	65 days		1397					-				
	CH1930 Pier (1set x 3nos.):		0 days	12 days	0%	Tue 5/10/21	Tue 19/10/21		NA	Fri 8/10/21	Fri 22/10/21	3 days		1075,1076,1066									
) I	CH1950-CH2020: Pier (3sets x 3nos) - 1 day/no 1 team		0 days	11 days	0%		Mon 1/11/21		NA	Sat 23/10/21	Thu 4/11/21	3 days		579,1398,1399									
	Falsework Temporary Works Design and Method Statement Submission		0 days	0 days	0%	Wed 1/9/21	Wed 1/9/21		NA	Tue 21/9/21	Tue 21/9/21	20 days						1/9	9				
	Falsework Temporary Works Design and Method Statement Comment & Approval	45 days	0 days	45 days	0%	Wed 1/9/21	Fri 15/10/21		NA	Tue 21/9/21	Thu 4/11/21	20 days	1 day	1401									
3	Falsework erection	10 days	0 days	10 days	0%	Tue 2/11/21	Fri 12/11/21	NA	NA	Fri 5/11/21	Tue 16/11/21	3 days	1 day	1400,1402					H				
	Deck & Secondary Upstand Beam Temporary Works Design and Method Statement Submission	0 days	0 days	0 days	0%	Wed 1/9/21	Wed 1/9/21	NA	NA	Sun 3/10/21	Sun 3/10/21	32 days	1 day					<b>4</b> 1/9	9				
5	Deck & Secondary Upstand Beam Temporary Works Design and Method Statement Comment & Approval	45 days	0 days	45 days	0%	Wed 1/9/21	Fri 15/10/21	NA	NA	Sun 3/10/21	Tue 16/11/21	32 days	1 day	1404					411				
6	Deck (4 bays) 12d/bay & link bridge (12d/bay)	25 days	0 days	25 days	0%	Sat 13/11/21	Sat 11/12/21	NA	NA	Wed 17/11/21	Wed 15/12/21	3 days	1 day	1403,625,623FS					#	$\ \ \ $			
	Task	Summary			Inactive M	ilestone		Duration-or	nly		Start-only			Exten	nal Milestone	<b>♦</b>		(Crit	tical Spl	<u>                                      </u>			<u> </u>
	11 Prog with Progress May-20 Split	Project Sur	mmary		Inactive Su				mmary Rollup		Finish-only		3	Deadl		•			gress				
۵۵-۱۱	Milestone •	Inactive Ta	ask		Manual Ta	sk		Manual Sui	mmary		External Tas	sks		Critica	al			Ma	nual Pro	ogress	_		_



									/2018/01 KT											
Task Naı	ne	Duration	n Actual Duration	Remaining Duration	Physical % Complete	Early Start	Early Finish	Actual Start	Actual Finish	h Late Start	Late Finish	Total TRA Slack	Predecessors	2020 O2   O3	O4 O1	2021 Q2   Q3	04 0	2022 1   Q2   C		Q1   Q2
451	Lift Pilecap and ELS - Temp. Works Foundation Design and Method Statement Comment & Appraoval	30 days	0 days	30 days	0%	Mon 21/12/20	Tue 19/1/21	NA	NA	Tue 16/11/21	Wed 15/12/21	330 days 0.5 day	1450	<u>-</u>						
452	Intall Sheetpile, ELS, Excavation and Temp. Works Installation (Shoring, Drainage & Slope Protection)	38 days	0 days	38 days	0%	Tue 2/2/21	Sat 20/3/21	NA	NA	Thu 16/12/21	Fri 4/2/22	259 days 2 days	1447,1451			$\dashv \parallel \parallel \parallel$				
453	Footing Construction	75 days	0 days	75 days	0%	Thu 13/5/21	Wed 11/8/21	NA	NA	Sat 5/2/22	Sat 7/5/22	218 days 2 days	1452,1449,587							
454	Sheepile Extraction & Backilling	25 days	0 days	25 days	0%	Thu 12/8/21	Thu 9/9/21	NA	NA	Mon 9/5/22	Tue 7/6/22	218 days 1 day	1453							
455	Lift Structure - Temp. Works Design and Method Statement Submission	0 days	0 days	0 days	0%	Tue 1/6/21	Tue 1/6/21	NA	NA	Tue 3/5/22	Tue 3/5/22	336 days 0.5 day				1/6				
456	Lift Structure - Temp, Works Design and Method Statement Comment & Appraova			36 days	0%	Tue 1/6/21	Tue 6/7/21	NA	NA	Tue 3/5/22	Tue 7/6/22	336 days 0.5 day	1455			1,,				
				-																
457	Lift Tower: Falsework & Formwork Erection, Rebar Fixing & Concreting		0 days	63 days	0%	Fri 10/9/21	Thu 11/11/21		NA	Wed 8/6/22	Tue 9/8/22	271 days 3 days	1454,1157,1456							
458	Lift installation (LT1 & LT2)	90 days	0 days	90 days	0%	Fri 24/12/21	Tue 19/4/22	NA	NA	Fri 11/11/22	Tue 28/2/23	261 days 1 day	1457FS+36 days							
159	E & M installation	33 days	0 days	33 days	0%	Wed 20/4/22	Fri 27/5/22	NA	NA	Wed 1/3/23	Wed 12/4/23	261 days 3 days	1458							.
160	Louvers and Glazing Installation	27 days	0 days	27 days	0%	Sat 11/12/21	Fri 14/1/22	NA	NA	Thu 8/9/22	Wed 12/10/22	220 days 3 days	1457FS+25 days					-		
161	Parapet Installation and Finishing Works	40 days	0 days	40 days	0%	Sat 15/1/22	Sat 5/3/22	NA	NA	Thu 13/10/22	Mon 28/11/22	220 days 3 days	1460							.
62	Testing & commissioning	15 days	0 days	15 days	0%	Sat 28/5/22	Wed 15/6/22	NA	NA	Thu 13/4/23	Sat 29/4/23	261 days 0.5 days	1459							
463	CLP Meter Installation	0 days	0 days	0 days	0%	Mon 18/4/22	Mon 18/4/22		NA	Mon 18/4/22	Mon 18/4/22	0 days 0.5 day						<b>♦</b> 18/4		
464					0%	Wed 15/6/22	Wed 15/6/22						1450 1460					1014		
	EMSD Submission Form 5 for Lift Inspection	0 days		0 days					NA	Tue 2/5/23	Tue 2/5/23	320 days 0.5 day							0/0	
465	EMSD Lift Inspection	0 days	0 days	0 days	0%	Wed 29/6/22	Wed 29/6/22		NA	Tue 16/5/23	Tue 16/5/23	320 days 0.5 day							29/6	
466	Issuance of Lift Use Permit	0 days	0 days	0 days	0%	Thu 14/7/22	Thu 14/7/22	NA	NA	Tue 30/5/23	Tue 30/5/23	320 days 0.5 day	1465FS+15 days						14/7	
67	Staircase ST1	100 day	s 0 days	100 days	0%	Fri 12/11/21	Tue 15/3/22	NA	NA	Fri 25/11/22	Sat 25/3/23	309 days 5 days	587,367,1457					<del>                                      </del>		
468	Finishing and E&M Works	50 days	0 days	50 days	0%	Wed 16/3/22	Tue 17/5/22	NA	NA	Mon 27/3/23	Tue 30/5/23	309 days 0.5 day	1467,367							+
169	L12d Underground Drainage and Utilities Laying	75 days	0 days	75 days	0%	Mon 7/3/22	Tue 7/6/22	NA	NA	Tue 29/11/22	Tue 28/2/23	220 days 1 day	1457,1460,1461							
170	L12d Roadworks and Pedestrian, with Light Pole	36 days	0 davs	36 days	0%	Wed 8/6/22	Wed 20/7/22	NA	NA	Wed 1/3/23	Sat 15/4/23	220 days 1 day	1469,349							
71	L12d Roadworks and Pedestrian		0 days	36 days	0%	Thu 21/7/22	Wed 31/8/22		NA	Mon 17/4/23	Tue 30/5/23	220 days 1 day	1470							
													1470							
	pen Space & Promenade		s 0 days	564 days	0%	Mon 28/6/21	Thu 18/5/23		NA	Sun 1/8/21	Tue 30/5/23	9 days								
173	Open Space & Promenade (From Northern End - CH1720)	564 day	s 0 days	564 days	0%	Mon 28/6/21	Thu 18/5/23	NA	NA	Sun 15/8/21	Tue 30/5/23	9 days								
74	Observation Deck	358 day	s 0 days	358 days	0%	Tue 1/3/22	Fri 12/5/23	NA	NA	Fri 6/5/22	Tue 30/5/23	14 days						<del>                                     </del>		╷═┼═┪║
75	Foundation - Temp. Works Design and Method Statement Submission	0 days	0 days	0 days	0%	Tue 1/3/22	Tue 1/3/22	NA	NA	Fri 6/5/22	Fri 6/5/22	66 days 0.5 day						1/3		
76	Foundation - Temp. Works Design and Method Statement Comment &	45 days	0 days	45 days	0%	Tue 1/3/22	Thu 14/4/22	NA	NA	Fri 6/5/22	Sun 19/6/22	66 days 0.5 day	1475,639,646							
.77	Appraoval G.I. works for LT5	12 days	0 days	12 days	0%	Sat 4/6/22	Fri 17/6/22	NA	NA	Mon 20/6/22	Mon 4/7/22	13 days 2 days	1447,611,604,15							
178	Design Vertification	25 days	0 days	25 days	0%	Sat 18/6/22	Mon 18/7/22	NA	NA	Tue 5/7/22	Tue 2/8/22	13 days 1 day	1477							.
179	Predrilling works for Socket H- pile	12 days	0 days	12 days	0%	Tue 19/7/22	Sat 30/7/22	NΔ	NA	Wed 3/8/22	Sun 14/8/22	15 days	1478							.
180	Socket H-pile Installation											12 days 2 days	367,1155,726,14							
	•		0 days	37 days	0%	Mon 1/8/22	Tue 13/9/22		NA	Mon 15/8/22	Tue 27/9/22									
481	Pile Testing	43 days	0 days	43 days	0%	Wed 14/9/22	Fri 4/11/22	NA	NA	Wed 28/9/22	Fri 18/11/22	12 days 1 day	1480							
182	Structure & Lift Core - Temp. Works Design and Method Statement Submission	0 days	0 days	0 days	0%	Mon 20/6/22	Mon 20/6/22	NA	NA	Wed 5/10/22	Wed 5/10/22	107 days 0.5 day						<b>a</b> 20	0/6	
483	Structure & Lift Core - Temp. Works Design and Method Statement Comment & Appraoval	45 days	0 days	45 days	0%	Mon 20/6/22	Wed 3/8/22	NA	NA	Wed 5/10/22	Fri 18/11/22	107 days 0.5 day	1482							.
184	Trech Excavation for Pipe Laying Works	30 days	0 days	30 days	0%	Sat 4/6/22	Sat 9/7/22	NA	NA	Wed 15/6/22	Wed 20/7/22	9 days 2 days	15							
185	Pipe laying works, Cable Laying and Drawpits	36 days	0 days	36 days	0%	Mon 11/7/22	Sat 20/8/22	NA	NA	Thu 21/7/22	Wed 31/8/22	9 days 5 days	15,1484							
186	Observation Deck: Substructure with Excavation/ELS works	36 days	0 days	36 days	0%	Sat 5/11/22	Fri 16/12/22	NA	NA	Sat 19/11/22	Sat 31/12/22	12 days 1 day	163,506,1483,14							
487	Observation Deck: Superstructure with Lift Core and Staircase work		0 days	72 days	0%	Sat 17/12/22	Sun 26/2/23		NA	Mon 2/1/23	Tue 14/3/23	16 days 1 day	1486							
488					0%															
	LTS: Lift installation with T&C and Statutory Inspection		0 days	60 days		Mon 27/2/23	Fri 12/5/23		NA	Wed 15/3/23	Tue 30/5/23	14 days 1 day	713,1487							
489	E&M and ABWF works, Landscaping and paving works	110 day	s 0 days	110 days	0%	Sat 17/12/22	Thu 4/5/23		NA	Thu 12/1/23	Tue 30/5/23	21 days 3 days	1528,717,1486							
490	Toilet	416 day	s 0 days	416 days	0%	Mon 28/6/21	Wed 16/11/2	2 NA	NA	Sun 15/8/21	Fri 24/2/23	41 days							<del>       </del>	
491	Foundation - Temp. Works Design and Method Statement Submission	0 days	0 days	0 days	0%	Mon 28/6/21	Mon 28/6/21	NA	NA	Sun 15/8/21	Sun 15/8/21	48 days 0.5 days				<b>◆</b> 28/6				
492	Foundation - Temp. Works Design and Method Statement Comment &	45 days	0 days	45 days	0%	Sat 24/7/21	Mon 6/9/21	NA	NA	Sun 15/8/21	Tue 28/9/21	22 days 0.5 days	1491,639,646							
493	Appraoval Footing	16 days	0 days	16 days	0%	Thu 16/9/21	Wed 6/10/21	NA	NA	Wed 29/9/21	Tue 19/10/21	10 days 0.5 days	987,611,604,618							
494	Structure - Temp. Works Design and Method Statement Submission		0 days	0 days	0%	Mon 26/7/21	Mon 26/7/21		NA	Fri 3/9/21	Fri 3/9/21	39 days 0.5 days				<b>♦</b> 26/7				
495	Structure - Temp. Works Design and Method Statement Comment &				0%	Mon 26/7/21	Fri 10/9/21		NA NA	Fri 3/9/21	Tue 19/10/21									
773	Appraoval	47 days	o days	47 days	0.70	1011 20/1/21	111 10/9/21	INA	INA	171 313121	1 uc 19/10/21	39 days 2 days	1474							
le: Rev.11 P	rog with Progress	Summary			Inactive N	_		Duration-c			Start-only	Е		mal Milestone	<b>\$</b>		ritical Split	-		
-	20 Split	Project Sur	mmary		Inactive S	ummary		Manual Su	mmary Rollup 🛮		Finish-only	3	Dead	lline	1	Pi	rogress	_		_

						Cont	Iact No. ED	/2018/01 K	(TD Project												
Γ	Task Name	Duration Actual Duration	Remaining Duration	Physical % Complete	Early Start	Early Finish	Actual Start	Actual Finis	ish Late Start	Late Finish	Total Slack	TRA	Predecessors	2020	04 01	2021	O4   O1	2022   Q2   Q3   Q	04 01 1	2023	04
96	Structure work	45 days 0 days	45 days	0%	Thu 7/10/21	Mon 29/11/21	NA	NA	Wed 20/10/21	Fri 10/12/21	10 days	0.5 days	1493,506,1495	Q2 Q3	Q4   Q1	Q2   Q3	Q4 Q1	<u>  Q2   Q3   Q</u>	Q4   Q1   C	22   Q3	<u>Q4</u>   <u>Q</u> .
97	MIC toilet unit	24 days 0 days	24 days	0%	Tue 30/11/21	Wed 29/12/21	NA	NA	Sat 11/12/21	Tue 11/1/22	10 days	0.5 days	1496								
98	MIC toilet unit: E&M and ABWF works	75 days 0 days	75 days	0%	Thu 30/12/21	Thu 31/3/22	NA	NA	Wed 23/2/22	Wed 25/5/22	43 days	3 days	1497,717								
99	Observation Tower Construction	31 days 0 days	31 days	0%	Thu 30/12/21	Tue 8/2/22	NA	NA	Wed 19/1/22	Sat 26/2/22	16 days	1 day	1496,1497								
500	Observation Tower: Building Works and E&M Works	76 days 0 days	76 days	0%	Wed 9/2/22	Thu 12/5/22	NA	NA	Mon 28/2/22	Tue 31/5/22	16 days	1 day	1499								
01	Refuse Collection Block and Back of House: Structure Works	101 days 0 days	101 days	0%	Wed 9/2/22	Sat 11/6/22	NA	NA	Fri 20/5/22	Sat 17/9/22	82 days	1 day	1496,1497,1499				#				
502	Refuse Collection Block and Back of House: Building Works and E&M	131 days 0 days	131 days	0%	Mon 13/6/22	Wed 16/11/22	NA	NA	Mon 19/9/22	Fri 24/2/23	82 days	1 day	1501								
03	Works Amphitheater	95 days 0 days	95 days	0%	Wed 9/2/22	Sat 4/6/22	NA	NA	Wed 11/5/22	Wed 31/8/22	74 days	5 days	1496,639,646,14				#				
04	Fast food (Light Refreshment) kiosk deck	45 days 0 days	45 days	0%	Tue 30/11/21	Mon 24/1/22	NA	NA	Thu 20/1/22	Wed 16/3/22	41 days	0.5 days	611,1496,604,61								
)5	Fast food (Light Refreshment) Kiosk: Building Works and E&M Works	86 days 0 days	86 days	0%	Sat 26/2/22	Sat 11/6/22	NA	NA	Thu 17/3/22	Thu 30/6/22	16 days	1 day	1504,639,646,14				+				
)6	Fitness Ground Lawn & Water Play Plaza	82 days 0 days	82 days	0%	Mon 13/6/22	Sat 17/9/22	NA	NA	Sat 2/7/22	Sat 8/10/22	16 days	1 day	days,1500FF+25 1505								
7	Stepped Stage and Seating & Back of House Facility (under Bridge D3)	30 days 0 days	30 days	0%	Mon 22/8/22	Mon 26/9/22		NA	Thu 1/9/22	Sat 8/10/22	9 days		1503,1485								
18	Trim and form formation level within Open Space & Promenade area	45 days 0 days	45 days	0%	Tue 27/9/22	Sat 19/11/22		NA	Mon 10/10/22	Wed 30/11/22	1		1507,1505,1506,								
19	Paving work & Hard Landscaping Works	45 days 0 days	45 days	0%		Thu 12/1/23		NA	Thu 1/12/22	Thu 26/1/23		2 days	1508,1500,1498								
.0	ABWF, E&M work and street furniture	75 days 0 days	75 days	0%		Mon 20/2/23		NA	Sat 25/2/23	Tue 30/5/23	79 days	-	1508,1509SS,15								
1	FSD Form 501 Submission for FS Inspection			0%									1510SS+50 days						тші і		
2		0 days 0 days	0 days		Mon 9/1/23		NA NA	NA	Mon 1/5/23	Mon 1/5/23	111 days								9/1		
	FSD Inspection	0 days 0 days	0 days	0%	Tue 24/1/23	Tue 24/1/23		NA	Tue 16/5/23	Tue 16/5/23	111 days		1511FS+15 days						24/1		
3	Issuance of FS Certificate	0 days 0 days	0 days	0%	Wed 8/2/23	Wed 8/2/23		NA	Tue 30/5/23	Tue 30/5/23	111 days		1512FS+15 days						♦ 8/2	.]]]	
4	Landscaping works and Planting works	100 days 0 days	100 days	0%	Fri 13/1/23	Thu 18/5/23		NA	Fri 27/1/23	Tue 30/5/23	1	4 days	1509,668,1503,6							1	
5	Open Space & Promenade (From CH1720 - South End)	477 days 0 days	477 days	0%	Mon 12/7/21	Mon 13/2/23		NA	Sun 1/8/21	Tue 30/5/23	18 days								7		
5	Modification Seawall - Temp. Works Design and Method Statement Submission	0 days 0 days	0 days	0%	Mon 12/7/21	Mon 12/7/21	NA	NA	Sun 1/8/21	Sun 1/8/21	20 days					12/	7				
7	Modification Seawall - Temp. Works Design and Method Statement Comment & Appraoval	k 30 days 0 days	30 days	0%	Mon 12/7/21	Tue 10/8/21	NA	NA	Sun 1/8/21	Mon 30/8/21	20 days	2 days	1516								
8	Modification (Seawall) CH1720-1820	150 days 0 days	150 days	0%	Wed 11/8/21	Fri 11/2/22	NA	NA	Tue 31/8/21	Thu 3/3/22	17 days	1 day	1517					<u> </u>			
9	Modification (Seawall) CH1820-1920	150 days 0 days	150 days	0%	Wed 15/9/21	Fri 18/3/22	NA	NA	Thu 7/10/21	Fri 8/4/22	17 days	1 day	1518SS+30 days					$h \mid   \mid   \mid   \mid   \mid  $			
0	Temporary toilet	24 days 0 days	24 days	0%	Mon 13/9/21	Tue 12/10/21	NA	NA	Fri 14/1/22	Mon 14/2/22	100 days	0.5 days	506,655,660								
1	Temporary Toilet: Building Works and E&M Works	75 days 0 days	75 days	0%	Wed 13/10/21	Wed 12/1/22	NA	NA	Sat 28/1/23	Sat 29/4/23	385 days	0.5 day	1520,655,660								
2	Temporary Management Office: Structure Works	45 days 0 days	45 days	0%	Sat 25/9/21	Thu 18/11/21	NA	NA	Wed 26/1/22	Tue 22/3/22	100 days	0.5 days	1520SS+10 days			4					
3	Temporary Management Office: Building Works and E&M Works	100 days 0 days	100 days	0%	Fri 19/11/21	Tue 22/3/22	NA	NA	Wed 23/3/22	Sat 23/7/22	100 days	0.5 day	1522,655,660					<del> </del>			
4	Floating Stage Concrete structure	18 days 0 days	18 days	0%	Sat 19/3/22	Sat 9/4/22	NA	NA	Sat 9/4/22	Tue 3/5/22	17 days	0 days	1519,1518,1522				•	<b>5</b>			
5	Stepped Seating at Southern End	24 days 0 days	24 days	0%	Mon 11/4/22	Wed 11/5/22	NA	NA	Wed 4/5/22	Tue 31/5/22	17 days	0.5 days	1524					<b>*</b>			
6	Trim and form formation level within Open Space & Promenade area	14 days 0 days	14 days	0%	Thu 12/5/22	Fri 27/5/22	NA	NA	Wed 1/6/22	Fri 17/6/22	17 days	0 days	1525							,	
7	Paving work and Landscaping Works	30 days 0 days	30 days	0%	Sat 28/5/22	Mon 4/7/22	NA	NA	Sat 18/6/22	Sat 23/7/22	17 days	0.5 days	1526,1522,1525,								
8	ABWF, E&M work and street furniture	75 days 0 days	75 days	0%	Tue 5/7/22	Fri 30/9/22	NA	NA	Mon 25/7/22	Sat 22/10/22	17 days	1 day	1527,717,1523								
.9	CLP Meter Installation	0 days 0 days	0 days	0%	Fri 30/9/22	Fri 30/9/22	NA	NA	Mon 1/5/23	Mon 1/5/23	212 days	0.5 day	1528,1521,1523					3	30/9		
80	FSD Form 501 Submission for FS Inspection	0 days 0 days	0 days	0%	Thu 8/12/22	Thu 8/12/22	NA	NA	Mon 1/5/23	Mon 1/5/23	144 days	0.5 day	1529						8/12		
1	FSD Inspection	0 days 0 days	0 days	0%	Thu 22/12/22			NA	Tue 16/5/23	Tue 16/5/23	144 days		1530FS+15 days						22/12		
2	Issuance of FS Certificate	0 days 0 days	0 days	0%	Fri 6/1/23	Fri 6/1/23		NA	Tue 30/5/23	Tue 30/5/23	144 days	-	1531FS+15 days						6/1		
13	Open Space & Promenade: Landscaping works	110 days 0 days	110 days	0%	Mon 3/10/22	Mon 13/2/23		NA	Mon 24/10/22	Sat 4/3/23	17 days	-	1528,668,1243Fl								
4	Open Space & Promenade: Planting works	110 days 0 days	110 days	0%	Mon 3/10/22	Mon 13/2/23		NA	Mon 24/10/22	Sat 4/3/23	17 days		1528,668,1243FI								
5	Part 1, 2A, 2B - Road L12	193 days 0 days	193 days	0%	Tue 23/8/22	Mon 17/4/23		NA	Thu 6/10/22	Tue 30/5/23	35 days		1020,000,124011								
6	Part 1, 2A, 2B - Road L12  Trim road formation			0%		Thu 25/8/22		NA NA					1274,1283,1296,						"		
		3 days 0 days	3 days		Tue 23/8/22				Thu 6/10/22	Sat 8/10/22	35 days	-									
37	Lay sub base	7 days 0 days	7 days	0%	Fri 26/8/22	Fri 2/9/22		NA	Mon 10/10/22	Mon 17/10/22			1536								
38	Lay kerb	12 days 0 days	12 days	0%	Sat 3/9/22	Sat 17/9/22		NA	Tue 18/10/22	Mon 31/10/22		-	1537					1			
39	Construct pedestrian street/ footpath	14 days 0 days	14 days	0%	Mon 19/9/22	Thu 6/10/22		NA	Tue 1/11/22	Wed 16/11/22		-	1538					1	.		
10	Install central median	14 days 0 days	14 days	0%	Fri 7/10/22	Sat 22/10/22	NA	NA	Thu 17/11/22	Fri 2/12/22	35 days	1 day	1539								
e: Re	ev. I I Prod with Progress	Summary		Inactive M			Duration-o			Start-only		С		nal Milestone	<b>♦</b>		Critical Split				
	2-May-20 Split	Project Summary		Inactive S	ummary		Manual Su	mmary Rollup		Finish-only		3	Dead	line	1		Progress				

							Conf	ract No. ED/	2018/01 KT	D Project													
1	Task Name	Duration	Actual Duration	Remaining Duration	Physical % Complete	Early Start	Early Finish	Actual Start	Actual Finish	Late Start	Late Finish	Total Slack	TRA	Predecessors	2020 Q2   Q	03   Q4	01   0	2021 2   Q3   Q4	1 01 02	2022   Q3   Q4	Q1   C	2023 02   Q3	O4 O1
1541	Concrete infill between profile barrier	7 days	0 days	7 days	0%	Mon 24/10/22	Mon 31/10/22	NA	NA	Sat 3/12/22	Sat 10/12/22	35 days	0 days	1540						F			
542	Road pavement	5 days	0 days	5 days	0%	Tue 1/11/22	Sat 5/11/22	NA	NA	Mon 12/12/22	Fri 16/12/22	35 days	0 days	1541						<u> </u>			
543	Install street furniture (Part 1, 2A, 2B - Road L12)	131 days	0 days	131 days	0%	Mon 7/11/22	Mon 17/4/23	NA	NA	Sat 17/12/22	Tue 30/5/23	35 days	6 days	1542									
544	Planting Works for Underpass, South Depress Road and At-Grade Road	130 days	0 days	130 days	0%	Mon 7/11/22	Sat 15/4/23	NA	NA	Mon 19/12/22	Tue 30/5/23	36 days	10 days	668							<b>-</b>		
545	Landscaping Works for Underpass, South Depress Road and At-Grade	130 days	0 days	130 days	0%	Mon 7/11/22	Sat 15/4/23	NA	NA	Mon 19/12/22	Tue 30/5/23	36 days	10 days	668									
546	Planned Completion for Section 6	0 days	0 days	0 days	0%	Thu 18/5/23	Thu 18/5/23	NA	NA	Tue 30/5/23	Tue 30/5/23	9 days	0 days	1533,1543,1532,								18/5	
547	Section 7	365 days	0 days	365 days	0%	Mon 6/3/23	Wed 29/5/24	NA	NA	Mon 6/3/23	Wed 29/5/24	0 days											
548	Establishment work for landscape softwork	365 days	0 days	365 days	0%	Mon 6/3/23	Wed 29/5/24	NA	NA	Mon 6/3/23	Wed 29/5/24	0 days	10 days	1533,1534									
549	Planned Completion for Section 7	0 days	0 days	0 days	0%	Wed 29/5/24	Wed 29/5/24	NA	NA	Wed 29/5/24	Wed 29/5/24	0 days		1548,6									
550	Section 10 (Subject to Excision)	614 days	0 days	614 days	0%	Tue 20/4/21	Thu 11/5/23	NA	NA	Mon 10/5/21	Tue 30/5/23	15 days					_				1	ı	
551	Decking for Underpass (Rd L14)	614 days	0 days	614 days	0%	Tue 20/4/21	Thu 11/5/23	NA	NA	Mon 10/5/21	Tue 30/5/23	15 days					-					ı	
552	Deck for Underpass (Road L14) - Temp. Works Design and Method Statement	0 days	0 days	0 days	0%	Tue 20/4/21	Tue 20/4/21	NA	NA	Mon 10/5/21	Mon 10/5/21	20 days	0.5 day				•	20/4					
553	Deck for Underpass (Road L14) - Temp. Works Design and Method Statement Comment & Appraoval	21 days	0 days	21 days	0%	Tue 20/4/21	Mon 10/5/21	NA	NA	Mon 10/5/21	Sun 30/5/21	20 days	0.5 day	1552			<u> </u>						
554	Support along U-through	225 days	0 days	225 days	0%	Mon 31/5/21	Tue 1/3/22	NA	NA	Mon 31/5/21	Tue 1/3/22	0 days	10 days	23,185,1553,192									
555	Plinth installation along support	123 days	0 days	123 days	0%	Wed 2/3/22	Fri 29/7/22	NA	NA	Wed 2/3/22	Fri 29/7/22	0 days	6 days	1554					<u> </u>				
556	Placing of beam along underpass	90 days	0 days	90 days	0%	Thu 1/9/22	Sun 18/12/22	NA	NA	Thu 1/9/22	Mon 19/12/22	0 days	4 days	1555FS+28 days						+	$\ $		
557	Finishing and E&M Works	110 days	0 days	110 days	0%	Mon 19/12/22	Fri 5/5/23	NA	NA	Thu 12/1/23	Tue 30/5/23	20 days		1556,279						•			
558	Cover-up (Roof)	115 days	0 days	115 days	0%	Mon 19/12/22	Thu 11/5/23	NA	NA	Mon 19/12/22	Thu 11/5/23	0 days	5 days	1556								H	
559	Planned Completion for Section 10	0 days	0 days	0 days	0%	Thu 11/5/23	Thu 11/5/23	NA	NA	Tue 30/5/23	Tue 30/5/23	19 days	0.5 days	1558,158,1557							4	11/5	

# **Appendix C – Environmental monitoring schedules**

# Contract No. EDO 15/2018 Environmental Monitoring at Kai Tak Development Stage 4 Infrastructure at the former runway and south apron Environmental Monitoring and Weekly Site Inspection Schedule for November 2021

# November 2021

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3 24-hr TSP: AM3, AM4(A), AM7 1-hr X3 TSP: AM3,	4 Weekly Site Inspection	5	6
_			AM4(A), AM7 30-min Noise: M11, M12			
7	8	9 Weekly Site Inspection 24-hr TSP: AM3, AM4(A), AM7 1-hr X3 TSP: AM3, AM4(A), AM7 30-min Noise: M11, M12	10	11 Weekly Site Inspection + SSMC meeting	12	13
14	15 24-hr TSP: AM3, AM4(A), AM7 1-hr X3 TSP: AM3, AM4(A), AM7 30-min Noise: M11, M12	16	17	18 Weekly Site Inspection	19	20 24-hr TSP: AM3, AM4(A), AM7 1-hr X3 TSP: AM3, AM4(A), AM7
21	22	23	24	25 Weekly Site Inspection	26 24-hr TSP: AM3, AM4(A), AM7 1-hr X3 TSP: AM3, AM4(A), AM7 30-min Noise: M11, M12	27
28	29	30				

# NOTE:

1) Site inspection schedule and Impact monitoring schedule may be changed due to unforeseen circumstance (e.g. adverse weather).

# **Air Quality Monitoring Station**

AM3 - Sky Tower

 $\ensuremath{\mathsf{AM4}}(A)$  - The Hong Kong Society for the Blind's Factory cum Sheltered Workshop

AM7 - Hong Kong Children's Hospital

# **Noise Quality Monitoring Station**

M11 - The Hong Kong Society for the Blind's Factory cum Sheltered Workshop

M12 - Hong Kong Children's Hospital

# Contract No. EDO 15/2018 Environmental Monitoring at Kai Tak Development Stage 4 Infrastructure at the former runway and south apron Propose Environmental Monitoring and Weekly Site Inspection Schedule for December 2021

# December 2021

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1	Weekly Site Inspection 24-hr TSP: AM3, AM4(A), AM7 1-hr X3 TSP: AM3, AM4(A), AM7 30-min Noise: M11, M12	3	4
5	6	7	8 24-hr TSP: AM3, AM4(A), AM7 1-hr X3 TSP: AM3, AM4(A), AM7 30-min Noise: M11, M12	9 Weekly Site Inspection	10	11
12	13	Weekly Site Inspection+ SSMC meeting 24-hr TSP: AM3, AM4(A), AM7 1-hr X3 TSP: AM3, AM4(A), AM7 30-min Noise: M11, M12	15	16	17	18
19	20 24-hr TSP: AM3, AM4(A), AM7 1-hr X3 TSP: AM3, AM4(A), AM7 30-min Noise: M11, M12	21	22	Weekly Site Inspection	24 24-hr TSP: AM3, AM4(A), AM7 1-hr X3 TSP: AM3, AM4(A), AM7	25
26	27	28	29	30 Weekly Site Inspection 24-hr TSP: AM3, AM4(A), AM7 1-hr X3 TSP: AM3, AM4(A), AM7 30-min Noise: M11, M12	31	

### NOTE:

1) Site inspection schedule and Impact monitoring schedule may be changed due to unforeseen circumstance (e.g. adverse weather).

## **Air Quality Monitoring Station**

AM3 - Sky Tower

 $\mbox{\rm AM4}(\mbox{\rm A})$  - The Hong Kong Society for the Blind's Factory cum Sheltered Workshop

AM7 - Hong Kong Children's Hospital

# Noise Quality Monitoring Station

M11 - The Hong Kong Society for the Blind's Factory cum Sheltered Workshop

M12 - Hong Kong Children's Hospital

# **Appendix D – Photographic records**

# Impact Air Quality Monitoring



Measurement setup at AM3



Measurement setup at AM4(A)



Measurement setup at AM7

# Impact Noise Monitoring



Measurement setup at M11



Measurement setup at M12



Weather Station at the rooftop of Hong Kong Children's Hospital

Appendix E – Calibration certificates, catalogue of air quality monitoring equipment

# Catalogue of High Volume Sampler (HVS)



The TE-5170 is a high volume ambient Total Suspended Particulate (TSP) air sampler featuring a mass flow controller (MFC) for accurate and consistent particulate sampling. The mass flow controller adjust the motor speed as the filter media collects particulate to maintain a constant flow rate throughout the entire sample duration. The system utilizes a stainless steel filter holder for use with standard 8" x 10" filter paper. The anodized aluminum shelter and robust electrical components allow the system to operate a continuous 24 hour sample.

ABOUT US: Tisch Environmental Inc. Tisch Environmental is the benchmark for high volume air sampling, particulate. metals, volatiles, and specialty monitoring equipment. Since the company's inception in 1953 as General Metal Works, our product line has expanded from the first high volume air sampler to include high-tech and custom samplers. Our clients are professionals from every sector of the regulatory and industrial markets.

- Total Suspended Particulate(TSP)
- Mass Flow Controlled
- 7-Day Mechanical Timer
- Flapsed Time Indicator
- Aluminum Outdoor Shelter
- Brush Style Motor
- Dickson Chart Recorder, 24 Hour
- Stainless Steel Filter Holder
- 36-60 CFM
- Made In USA

TE-5170 TSP MFC, 110 Volt 60 Hertz, 8 Amps TE-5170X TSP MFC, 220 Volt 50 Hertz 4 Amps TE-5170XZ TSP MFC, 220 Volts 60 Hertz, 4 Amps TE-5028 -Variable Flow Calibration Kit TE-HVC-V Xcalibrator HiVol Calibrator

# TSP MFC

MFC TSP Ambient Air Sampler

Particulate Size: Total Suspended Particulate (TSP) EPA Designation: CFR 40 Part 50 Appendix B Flow Controller: Mass Flow Controller

Motor Style: Brush Style Motor Assembly

Timer: 7 Day Mechanical

Elapsed Time Indicator: Mechanical, Hours and Tenths

Pressure Recorder: Dickson Chart Recorder, 24 hour

Flow Range: 39-60CFM, 1.09M<sup>3</sup>M-1.68M<sup>3</sup>M

Housing: Anodized Aluminum Filter Holder: Stainless Steel, 8" x 10" 4" Recorder Charts: Box of 100

Filter Holder: 8" x 10" Stainless Steel with hold down frame

US EPA Reference Method Sampling, CFR Appendix J Part 50 Regulatory Compliance

Institutional Studies Construction Sites

Bridge and Water Tower Painting Sites

Fence Line Monitoring Industrial Monitoring Landfill Monitoring

Public Health Applications

TE-3000 Filter Holder Cartridge TE-G653 8" x 10" Glass Fiber Filter Media

TE-33384 Motor Brush Set (110volt) TE-33378 Motor Brush Set (220volt)

TE-116311 Replacement Motor (110volt) TE-116312 Replacement Motor (220volt)

TE-106 Recorder Charts TE-160 Recorder Pen Points

TE-5018 Gasket 8" x 10"

Weight: 75lbs, Shelter

Shipping Dimensions: 46"W x 23"L x 20" H, Shelter 19"W x 19"L x 20"H, Lid

Assembled Dimensions: 28"W x 28"L x 61"H



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# Air Sampler Calibration Curve Plotting & Calculation (Dickson recorder)

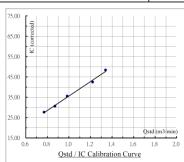
Calibration curve ref. No. :	ATSPC-01-2021092001	Date of calibration :	20/09/2021
Location :	Sky Tower	Sampler :	TE-5170X
Calibration Data			
Ambient barometric pressure	, Pa = 757.6 ( mmHg )	Ambient temperature, Ta =	304.55 (deg K)
Ostd Slope, m = 2.035	18	Ostd Intercept, b = -0.0	05890

#### Calibration Curve

Plate No.	H <sub>2</sub> O	Qstd	I	IC
Plate No.	( in )	( m <sup>3</sup> / min )	( chart )	( corrected )
18	7.60	1.341	49.0	48.39
13	6.30	1.221	43.0	42.47
10	4.10	0.985	36.0	35.55
7	3.20	0.871	31.0	30.62
5	2.50	0.770	28.0	27.65

#### Subsequent calculation of sampler flow

Method	Calibration equation	Slope, m	Intercept, b	Corr. coeff., r
Dickson recorder	Qstd = 1 / m1 [ (I) ( Sqrt ( ( Pav / 760 ) ( 298 / Tav ) ) ) - b1 ]	35.555	0.0439	0.9968



Calibration curve requirements : (A). r > 0.990; (B). At least 3 Qstd numbers are in the TSP range (1.1 - 1.7 m3 / min).

 $\begin{array}{ll} Remark: & Qstd \ (\ m^3 \ / \ min \ ) = 1/m \ [\ Sqrt \ (\ H_2O \ (\ Pa \ / \ 760 \ ) \ (\ 298 \ / \ Ta \ ) \ ) - b \ ]. \\ \\ IC \ (\ corrected \ ) = 1 \ [\ Sqrt \ (\ (\ Pa \ / \ 760 \ ) \ (\ 298 \ / \ Ta \ ) \ ]. \\ \end{array}$ 

FLOW ( corrected ) = Sqrt ( FLOW ( mano ) ( Pa / 760 ) ( 298 / Ta ) ).

Calibrated by: \_\_\_\_ Checked by: \_\_\_\_

Name: ( Poon Tsz Wing ) Name: ( Wong Yin Tong )

Form No. INS-HVS-CAL dd 16 01 2020

# Air Sampler Calibration Curve Plotting & Calculation (Dickson recorder)

 Calibration curve ref. No.:
 ATSPC-01-2021111801
 Date of calibration:
 18/11/2021

 Location:
 Sky Tower
 Sampler:
 TE-5170X

 Calibration Data

 Ambient barometric pressure, Pa = \_\_760.6 \_\_(mmHg)
 Ambient temperature, Ta = \_\_300.45 \_\_(deg K)
 (deg K)

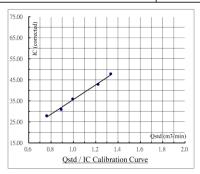
 Qstd Slope, m = \_\_2.03518
 Qstd Intercept, b = \_\_-0.005890

### <u>Calibration Curve</u>

Plate No.	H <sub>2</sub> O	Qstd	I	IC
Plate No.	( in )	( m <sup>3</sup> / min )	( chart )	( corrected )
18	7.40	1.335	48.0	47.82
13	6.20	1.222	43.0	42.84
10	4.10	0.994	36.0	35.87
7	3.30	0.892	31.0	30.89
5	2.40	0.761	28.0	27.90

Subsequent calculation of sampler flow

Method	Calibration equation	Slope, m	Intercept, b	Corr. coeff., r
Dickson recorder	Qstd = 1 / m1 [ (1) ( Sqrt ( ( Pav / 760 ) ( 298 / Tav ) ) ) - b1 ]	34.907	0.7324	0.9962



Calibration curve requirements : (A). r > 0.990; (B). At least 3 Qstd numbers are in the TSP range (1.1 - 1.7 m3 / min).

 $Remark: \\ Qstd ( m^3 / min ) = 1/m [ Sqrt ( H_2O ( Pa / 760 ) ( 298 / Ta ) ) - b ]. \\$ 

IC ( corrected ) = I [ Sqrt ( ( Pa / 760 ) (  $298 \, / \, Ta$  ) ) ].

FLOW (corrected) = Sqrt (FLOW (mano) (Pa / 760) (298 / Ta)).

Form No. INS-HVS-CAL dd 16 01 2020

# Air Sampler Calibration Curve Plotting & Calculation (Dickson recorder)

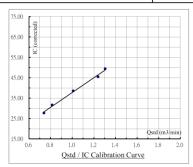
Calibration co	urve ref. No. : ATS	SPC-01-202	21092002	Date of calibration :	20/09/2021	
Location :	The Hong Kong So Factory cum She			Sampler:	TE-5170X	
Calibration L	<u>Data</u>		•			
Ambient baro	metric pressure, Pa =	757.6	( mmHg )	Ambient temperature, Ta	= 304.55	( deg K )
Octd Slope n	2 03518			Oetd Intercent h =	0.005890	

### Calibration Curve

Plate No.	H <sub>2</sub> O	Qstd	I	IC
Plate No.	( in )	( m <sup>3</sup> / min )	( chart )	( corrected )
18	7.20	1.305	50.0	49.38
13	6.50	1.240	46.0	45.43
10	4.30	1.009	39.0	38.52
7	2.80	0.815	32.0	31.60
5	2.30	0.739	28.0	27.65

Subsequent calculation of sampler flow

Method	Calibration equation	Slope, m	Intercept, b	Corr. coeff., r
Dickson recorder	Qstd = 1 / m1 [ (1) ( Sqrt ( ( Pav / 760 ) ( 298 / Tav ) ) ) - b1 ]	36.249	1.4837	0.9966



Calibration curve requirements : (A). r > 0.990; (B). At least 3 Qstd numbers are in the TSP range (1.1 - 1.7 m3 / min ).

Remark:  $Qstd(m^3/min) = 1/m [Sqrt(H_2O(Pa/760)(298/Ta)) - b].$ 

IC ( corrected ) = I [ Sqrt ( ( Pa / 760 ) ( 298 / Ta ) ) ].

FLOW ( corrected ) = Sqrt ( FLOW ( mano ) ( Pa / 760 ) ( 298 / Ta ) ).

Calibrated by : Checked by : Checked by : Wong Yin Tong )

Form No. INS-HVS-CAL dd 16 01 2020

# Air Sampler Calibration Curve Plotting & Calculation (Dickson recorder)

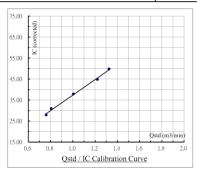
Calibration cu	rve ref. No. : A	TSPC-01-20	21111802	Date of calibration:	18/11/2021	
Location:	The Hong Kong Se Factory cum Sh			Sampler :	TE-5170X	
Calibration D	<u>ata</u>					
Ambient baror	metric pressure, Pa =	760.6	( mmHg )	Ambient temperature, Ta =	300.45	( deg K )
Qstd Slope, m	= 2.03518			Qstd Intercept, b = -0.0	005890	

#### Calibration Curve

Plate No.	$H_2O$	Qstd	I	IC
	( in )	( m <sup>3</sup> / min )	( chart )	( corrected )
18	7.30	1.326	50.0	49.81
13	6.20	1.222	45.0	44.83
10	4.20	1.006	38.0	37.86
7	2.70	0.807	31.0	30.89
5	2,40	0.761	28.0	27.90

Subsequent calculation of sampler flow

Method	Calibration equation	Slope, m	Intercept, b	Corr. coeff., r
Dickson recorder	Qstd = 1 / m1 [ ( I ) ( Sqrt ( ( Pav / 760 ) ( 298 / Tav ) ) ) - b1 ]	36.925	0.4318	0.9976



Calibration curve requirements : (A). r > 0.990; (B). At least 3 Qstd numbers are in the TSP range (1.1 - 1.7 m3 / min).

 $\begin{array}{lll} Remark: & Qstd \, (\,m^3/\,min\,) = I/m \, [\, Sqrt \, (\, H_2O \, (\, Pa\,/\,760\,) \, (\, 298\,/\,Ta\,)\,) \, \cdot b\, ]. \\ \\ IC \, (\, corrected\,) = I \, [\, Sqrt \, (\, (\, Pa\,/\,760\,) \, (\, 298\,/\,Ta\,)\,) \, ]. \\ \\ FLOW \, (\, corrected\,) = \, Sqrt \, (\, FLOW \, (\, mano\,) \, (\, Pa\,/\,760\,) \, (\, 298\,/\,Ta\,)\,). \end{array}$ 

Calibrated by : Checked by : Name : ( Poon Tsz Wing ) Name : ( Wong Yin Tong )

Form No. INS-HVS-CAL dd 16 01 2020

### Air Sampler Calibration Curve Plotting & Calculation (Dickson recorder)

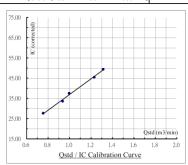
Calibration curv	ve ref. No. :	ATSPC-01-202	21092003	Date of calibration:	20/	09/2021	
Location:	Hong Kong	Children's Hos	pital	Sampler :		TE-5170X	
Calibration Da	<u>ta</u>						
Ambient barom	etric pressure, Pa	= 757.6	( mmHg )	Ambient temperature,	Га =	304.55	( deg K )
Qstd Slope, m =	2.03518			Qstd Intercept, b =	-0.0058	90	

Calibration Curve

Curror Curre				
Plate No.	H <sub>2</sub> O	Qstd	I	IC
Flate No.	( in )	( m <sup>3</sup> / min )	( chart )	( corrected )
18	7.30	1.314	50.0	49.38
13	6.40	1.231	46.0	45.43
10	4.20	0.997	38.0	37.53
7	3.70	0.936	34.0	33.58
5	2.40	0.755	28.0	27.65

Subsequent calculation of sampler flow

Method	Calibration equation	Slope, m	Intercept, b	Corr. coeff., r
Dickson recorder	Ostd = 1 / m1 [(1)(Sgrt((Pay / 760)(298 / Tay))) - b1]	38.705	-1.7943	0.9974



 $Calibration \ curve \ requirements: \quad (A). \ \ r > 0.990 \ ; \ \ (B). \ \ At \ least \ 3 \ Qstd \ numbers \ are in the \ TSP \ range \ (\ 1.1 - 1.7 \ m3 \ / \ min \ ).$ 

Qstd  $(m^3 / min) = 1/m [Sqrt (H_2O (Pa / 760) (298 / Ta)) - b].$ IC ( corrected ) = I [ Sqrt ( (Pa / 760) (298 / Ta) )].

FLOW ( corrected ) = Sqrt ( FLOW ( mano ) ( Pa / 760 ) ( 298 / Ta ) ).

Checked by Calibrated by: Name: ( Poon Tsz Wing Name:

Form No. INS-HVS-CAL dd 16 01 2020

### Air Sampler Calibration Curve Plotting & Calculation (Dickson recorder)

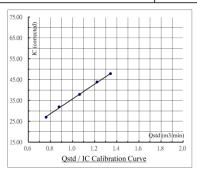
Calibration curve ref. No. : ATSP		TSPC-01-2021111803 Date of ca		Date of calibration :	18/11/2021	
Location:	Hong Kong C	hildren's Ho	spital	Sampler :	TE-5170X	
Calibration Date	<u>ta</u>					
Ambient barom	etric pressure, Pa =	760.6	( mmHg )	Ambient temperature, Ta =	300.45	( deg K )
Ostd Slope, m =	2.03518			Ostd Intercept, b = -0.	005890	

Calibration Curve

Cumbrumon Curre				
Plate No.	$H_2O$	Qstd	I	IC
riate No.	( in )	( m <sup>3</sup> / min )	( chart )	( corrected )
18	7.50	1.344	48.0	47.82
13	6.20	1.222	44.0	43.84
10	4.70	1.064	38.0	37.86
7	3.20	0.879	32.0	31.88
5	2.40	0.761	27.0	26.90

Subsequent calculation of sampler flow

Method	Calibration equation	Slope, m	Intercept, b	Corr. coeff., r
Dickson recorder	Qstd = 1 / m1 [ (1) ( Sqrt ( ( Pav / 760 ) ( 298 / Tav ) ) ) - b1 ]	35.609	0.1282	0.9993



Calibration curve requirements : (A). r > 0.990; (B). At least 3 Qstd numbers are in the TSP range (1.1 - 1.7 m3 / min ).

Qstd (  $m^3 / min$  ) = 1/m [ Sqrt (  $H_2O$  ( Pa / 760 ) ( 298 / Ta ) ) - b ]. Remark: IC (corrected) = I [ Sqrt ((Pa / 760)(298 / Ta))]. FLOW (corrected) = Sqrt (FLOW (mano) (Pa / 760) (298 / Ta)).

Calibrated by: Checked by: ( Poon Tsz Wing Name: Name: Form No. INS-HVS-CAL dd 16 01 2020

## Air Sampler Calibration Curve Plotting & Calculation

#### (Dickson recorder)

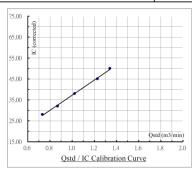
Calibration curve ref. No. :	ATSPC-01-2021	072001	Date of calibration :	20/07/2021	
Model no :	GS2310		Serial number :	10346	
Calibration Data					
Ambient barometric pressure,	Pa = 767.4	( mmHg )	Ambient temperature, Ta =	300.25	(deg K)
Ostd Slope. m = 2.0351	8		Ostd Intercept. b = -0.0	05890	

#### Calibration Curve

Distant.	H <sub>2</sub> O	Qstd	I	IC
Plate No.	( in )	( m <sup>3</sup> / min )	( chart )	( corrected )
18	7.40	1.341	50.0	50.05
13	6.20	1.228	45.0	45.05
10	4.30	1.023	38.0	38.04
7	3.10	0.869	32.0	32.03
5	2.20	0.732	28.0	28.03

#### Subsequent calculation of sampler flow

Method	Calibration equation	Slope, m	Intercept, b	Corr. coeff., r
Dickson recorder	Qstd = 1 / m1 [ ( I ) ( Sqrt ( ( Pav / 760 ) ( 298 / Tav ) ) ) - b1 ]	36.144	1.1009	0.9987



Calibration curve requirements: (A). r > 0.990; (B). At least 3 Qstd numbers are in the TSP range (1.1 - 1.7 m3 / min).

Remark: Qstd  $(m^3 / min) = 1/m [Sqrt (H_2O (Pa / 760) (298 / Ta)) - b].$ 

IC (corrected) = I [ Sqrt ((Pa / 760) (298 / Ta))].

FLOW (corrected) = Sqrt (FLOW (mano) (Pa / 760) (298 / Ta)).

Calibrated by Checked by ( Poon Tsz Wing Wong Yin Tong Name:

Form No. INS-HVS-CAL dd 16 01 2020

# Calibration Certificate for Calibrator



RECALIBRATION DUE DATE:

June 1, 2022

Calibration Certification Information				
Cal. Date: June 1, 2021	Rootsmeter S/N: 438320	Ta: 292	°K	
Operator: Jim Tisch		Pa: 754.9	mm Hg	
Calibration Model #: TE-5025A	Calibrator S/N: 0006			

Run	Vol. Init (m3)	Vol. Final (m3)	ΔVol. (m3)	ΔTime (min)	ΔP (mm Hg)	ΔH (in H2O)
1	1	2	1	1.4370	3.2	2.00
2	3	4	1	1.0130	6.4	4.00
3	5	6	1	0.9060	8.0	5.00
4	7	8	1	0.8590	8.9	5.50
5	9	10	1	0.7110	12.9	8.00

		Data Tabulat	ion		
Vstd (m3)	Qstd (x-axis)	$\sqrt{\Delta H \left(\frac{Pa}{Pstd}\right) \left(\frac{Tstd}{Ta}\right)}$ (y-axis)	Va	Qa (x-axis)	√∆H(Ta/Pa)
1.0094	0.7024	1.4239	0.9958	0.6929	0.8796
1.0051	0.9922	2.0136	0.9915	0.9788	1.2439
1.0029	1.1070	2.2513	0.9894	1.0921	1.3907
1.0017	1.1662	2.3612	0.9882	1.1504	1.4586
0.9964	1.4014	2.8477	0.9829	1.3824	1.7591
	m=	2.03518		m=	1.27440
QSTD	b=	-0.00589	QA	b=	-0.00364
	r=	0.99997	~ .	r=	0.99997

	Calculatio	ns	
Vstd=	ΔVol((Pa-ΔP)/Pstd)(Tstd/Ta)	Va=	ΔVol((Pa-ΔP)/Pa)
Qstd=	Vstd/∆Time	Qa=	Va/ΔTime
	For subsequent flow ra	te calculatio	ns:
Ostd=	1/m ( AH Path Tstd )-b)	Oa=	1/m(( √ΔH( Ta/Pa ) )-b

	Standard Conditions
Tstd:	298.15 °K
Pstd:	760 mm Hg
	Key
ΔH: calibrator	manometer reading (in H2O)
ΔP: rootsmete	er manometer reading (mm Hg)
Ta: actual abs	olute temperature (°K)
Pa: actual bar	ometric pressure (mm Hg)
b: intercept	
m: slope	

RECALIBRATION

US EPA recommends annual recalibration per 1998 40 Code of Federal Regulations Part 50 to 51, Appendix B to Part 50, Reference Method for the Determination of Suspended Particulate Matter in the Atmosphere, 9.2.17, page 30

sch Environmental, Inc. 5 South Miami Avenue lage of Cleves, OH 45002 www.tisch-env.com

TOLL FREE: (877)263-7610 FAX: (513)467-9009

# Catalogue of Dust Meter (TSI Sidepak AM510)

The SidePak AM510 monitor's easy-to-read display shows your data as both real-time aerosol mass-concentration and 8-hour time-weighted average (TWA). With its convenient data logging and long battery life, the AM510 is also ideal for extended sampling. The easy-to-use TrakPro Data Analysis Software lets you create effective graphs and reports.

#### **User Friendly**

- + Small, lightweight and quiet to maximize worker acceptance
- + Rugged design with secure belt clip
- + Easy-to-understand user interface with only four keys
- + Lockable keypad prevents tampering while sampling
- + User-adjustable sample flow rate
- + Define, label and store multiple calibration constants
- + Easy-to-read LCD display
- + Convenient, threaded tripod socket accommodates area sampling

#### **Advanced Features**

- + Smart Battery Management System provides precise run time information, maximizes battery capacity and speeds charging
- Integrated pump allows use of size-selective aerosol inlet conditioners
- + Built-in impactors let you choose "none," 1.0, 2.5 or 10-micron cut off
- + 10-mm Dorr-Oliver cyclone for respirable sampling
- + Display shows real-time concentrations (mg/m3) and "on-the-fly" TWA as you data log
- + Display statistics: max, min and average readings, elapsed time and 8-hour TWA

#### **Quick and Easy Reports**

- + Convenient preprogramming for occupational exposure sampling
- + Data log for long periods and store multiple tests
- + Analyze data, print graphs and create reports with TrakPro Data Analysis Software
- + USB port lets you conveniently connect to your computer

#### Power to Spare

- + Long-lasting NiMH rechargeable battery packs eliminate
- + Choice of rechargeable NiMH smart battery packs or AA-cell pack

#### Model AM510 SidePak Personal Aerosol Monitor

#### Sensitivity

90° light scattering, Sensor Type 670 nm laser diode Aerosol 0.001 to 20 mg/m<sup>3</sup> Concentration Range (calibrated to respirable fraction of ISO 12103-1,

A1 test dust) 0.1 to 10 micrometer (µm)

Particle Size Range Minimum Resolution 0.001 mg/m<sup>3</sup>

Zero stability ±0.001 mg/m3 over 24 hours using 10-second time-constant Temperature Coefficient Approximately +0.0005 mg/m<sup>3</sup> per

°C (for variations from temperature at which instrument was last zeroed)

Flow Rate

User-adjustable, 0.7 to 1.8 Range liters/min (L/min)

**Temperature Range** 

32 to 120°F (0 to 50°C)

Storage Range -4 to 140°F (-20 to 60°C)

#### **Operational Humidity** 0 to 95% RH, non-condensing

Time Constant (LCD display)

Jser-adjustable, 1 to 60 seconds

Data Logging

Approx. 31,000 Data Points Logging Interval User-adjustable, 1 second to 1 hour

**User-Select Calibration Factors** 

Factory Setting 1.0 (non-adjustable)

User-defined Settings 3, with user-defined labels Range 0.1 to 10.0, user-adjustable

Weight

Physical 4.2 x 3.7 x 2.8 in. (106 x 92 x 70 mm) with 801723, 801724, 801729 or External Dimensions

801743 battery

5.1 x 3.7 x 2.8 in. (130 x 92 x 70 mm)

with 801708, 801722, 801728, 801735, or 801736 battery

16 oz (0.46 kg) with 801723, 801724,

801729 or 801743 battery

19 oz (0.54 kg) with 801708, 01722, 801728, 801735, or 801736 battery

2 line x 12 character LCD

Display Tripod Socket 1/4-20 female thread

# Power Supply/Charger (P/N 2613210) Input Voltage Range 100 to 240 VAC. S0 to 60 Hz

Input Voltage Range Output Voltage 9 VDC@10 A

#### Maintenance

Factory Clean/Calibrate Recommended annually User Zero Calibration Before each use As needed User Flow Calibration

#### Communications Interface

Type Connector, Instrument USB Mini-B (socket)

#### Minimum Computer Requirements for

TrakPro™ Data Analysis Software Communications Port Universal Serial Bus (USB)

v 1.1 or higher

Microsoft Windows® XP, or 7 Operating System

(32-bit or 64-bit) operating systems

#### **Battery Performance**

Battery Options	Charge Time (hrs)*	Intrinsic Safety Rating	Run Time (hrs @ 1.7 L/min)
1600 mAH NiMH Pack, 4.8 V (P/N 801723)	3.0	No	7.1
1650 mAH NiMH Pack, 4.8V (P/N 801724, 801729 or 801743)	3.5	CSA**	7.5
2700 mAH NiMH Pack, 4.8 V (P/N 801722 or 801728)	5.5	No	12.0
2700 mAH NiMH Pack, 4.8 V (P/N 801735)	5.5	No	12.0
6-Cell AA-size Alkaline Pack*** (P/N 801708 or 801736 with six user-supplied AA cells)	N/A	No	22.5

\*Of a fully depleted battery

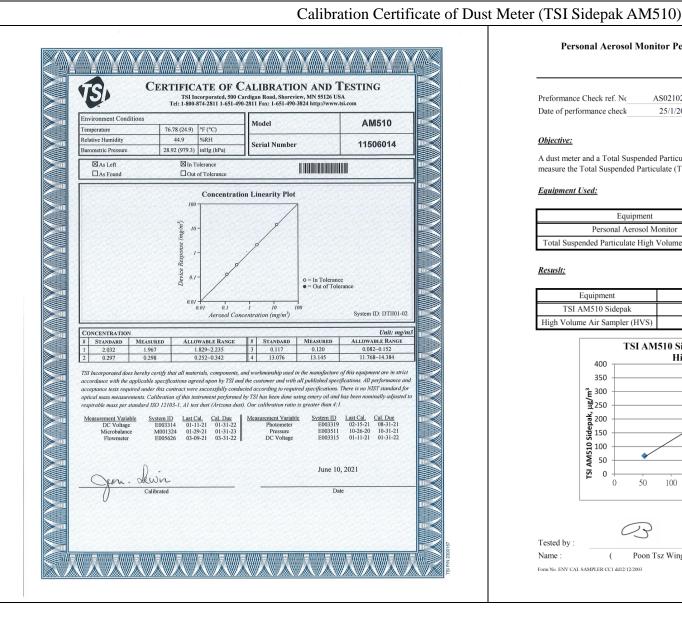
\*\*All dust plugs and dust gaskets must be installed.

\*\*\*Using Energizer AA-size, E91 alkaline batteries.

#### **Battery Level Indicator**

The Smart Battery Management System™ technology utilizes a built-in "gauge" in the SidePak™ battery packs. The gauge monitors battery capacity and calculates run time information by dividing capacity of the battery (mAH) by the instantaneous current consumed by the instrument (mA). This calculation is correct for current operating conditions and can change due to current (mA) consumption or changes in battery capacity.





#### Personal Aerosol Monitor Performance check with High Volume Sampler

Preformance Check ref. No	AS0210201-6	Report Issue Date	1/2/2021	
Date of performance check	25/1/2021			

#### Objective:

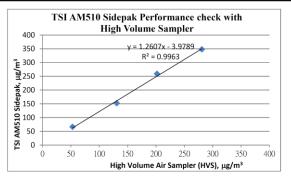
A dust meter and a Total Suspended Particulate High Volume Air Sampler (HVS) were placed together to measure the Total Suspended Particulate (TSP) concentrations simultaneously to check the performance.

#### Equipment Used:

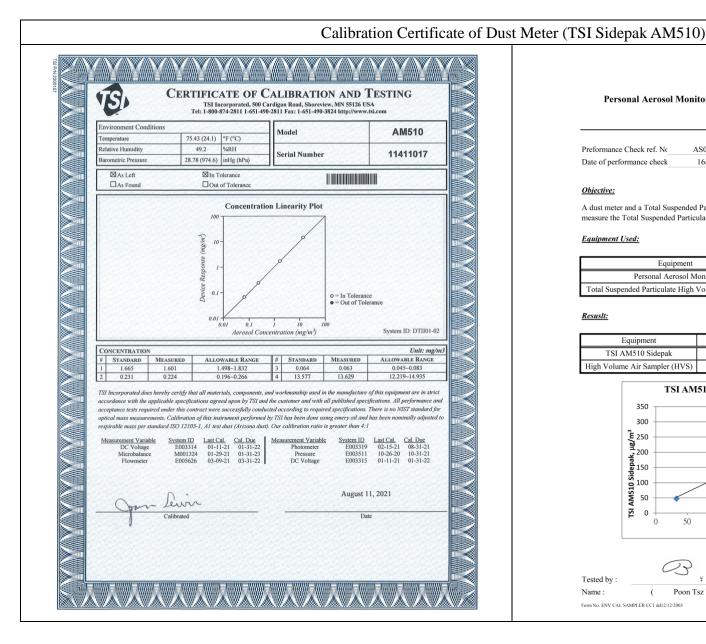
Equipment	Manufacturer and Model	Serial Number
Personal Aerosol Monitor	TSI AM510 Sidepak	11506014
Total Suspended Particulate High Volume Air Sampler	GS2310	10346

#### Resustt:

Equipment	Measurement Result, μg/m <sup>3</sup>				
TSI AM510 Sidepak	66 152 259 348				
High Volume Air Sampler (HVS)	53	131	202	281	



Tested by Checked by Poon Tsz Wing Wong Yin Tong Name: Name: Form No. ENV CAL SAMPLER CC1 dd12/12/2003



#### Personal Aerosol Monitor Performance check with High Volume Sampler

Preformance Check ref. No	AS0210818-1	Report Issue Date	18/08/2021
Date of performance check	16/08/2021		

#### Objective:

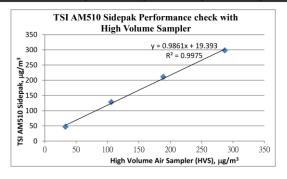
A dust meter and a Total Suspended Particulate High Volume Air Sampler (HVS) were placed together to measure the Total Suspended Particulate (TSP) concentrations simultaneously to check the performance.

#### Equipment Used:

Equipment	Manufacturer and Model	Serial Number
Personal Aerosol Monitor	TSI AM510 Sidepak	11411017
Total Suspended Particulate High Volume Air Sampler	GS2310	10346

#### Resustt:

Equipment	Measurement Result, μg/m <sup>3</sup>					
TSI AM510 Sidepak	47 128 211 298					
High Volume Air Sampler (HVS)	33	106	189	287		



		$\mathcal{O}_{\mathcal{I}}$					
Tested by:		4		Checked by:		·	
Name:	(	Poon Tsz Wing	)	Name:	(	Wong Yin Tong	)
Form No. ENV CAL SAN	IPLER CC1 dd1	2/12/2003					

# Catalogue of Weather Station

# Cabled Vantage Pro2™ & Vantage Pro2 Plus™ Stations



6152C 6162C

Vantage Pro2™

The Vantage Pro2<sup>™</sup> (# 6152C) and Vantage Pro2<sup>™</sup> Plus (# 6162C) cabled weather stations include two components: the Integrated Sensor Suite (ISS) and the console. The ISS contains the sensor interface module (SIM), rain collector, an anemometer, and a passive radiation shield. The Vantage Pro2 console provides the user interface, data display, and calculations. The Vantage Pro2 Plus weather station includes two additional sensors that are optional on the Vantage Pro2 and purchased separately: the UV Sensor and the Solar Radiation Sensor. The console and ISS are powered by an AC-power adapter connected to the console. Batteries can be installed in the console to provide a backup power supply. Use WeatherLink® to let your weather station interface with a computer, log data, and upload weather information to the Internet. The 6152C and 6162C models rely on passive shielding to reduce solar-radiation induced temperature errors in the outside temperature sensor readings.

#### Integrated Sensor Suite (ISS)

Operating Temperature	-40° to +150°F (-40° to +65°C)
Non-operating Temperature	-40° to +158°F (-40° to +70°C)
Current Draw.	5 mA (average) at 4 to 6 VDC for ISS only. 10 mA average for both console and ISS
Connectors, Sensor	Modular RJ-11
Cable Type	4-conductor, 26 AWG
Cable Length Anemometer	40' (12 m) (included): 240' (73 m) (maximum recommended)

Maximum displayable wind decreases as the length of cable increases, at 140' (42 m) of cable, the maximum wind speed displayed is 135 mph (60 m/s); at 240' (73 m), the maximum wind speed displayed is 100 mph (34 m/s)

Wind Speed Sensor . . . . . . . . . . . . . . . . Solid state magnetic sensor Wind Direction Sensor . . . . . . . . . . . . . . . . . Wind vane with potentiometer (214 cm<sup>2</sup>) collection area Temperature Sensor Type...... PN Junction Silicon Diode Relative Humidity Sensor Type . . . . . . . . . . . . Film capacitor element Sensor Inputs 

ISS Dimensions(not including anemometer or bird spikes):

Vantage Pro2 with Fan-Asprated Rad Shield........... 20.8" x 9.4" x 16.0" (528 mm x 239 mm x 406 mm) Vantage Pro2 Plus with Standard Rad Shield . . . . . . . . 14.3" x 9.7" x 14.5" (363 mm x 246 mm x 368 mm) Vantage Pro2 Plus with Fan-Aspirated Rad Shield . . . . . 21.1" x 9.7" x 16.0" (536 mm x 246 mm x 406 mm)



DAVIS [""||| \* Davis Instruments 3465 Diablo Ave., Hayward, CA 94545-2778 USA (510) 732-9229 \* FAX (510) 670-0589 \* sales@davisinstruments.com \* www.davisinstruments.com

DS6152C, 6162C Rev. W 12/7/18

Vantage Pro2

## Ultra Violet (UV) Radiation Index (requires UV sensor)

Historical Graph Data . . . . . . . . . . . . Hourly Average, Daily, Monthly Highs Alarm . . . . . . High Threshold from Instant Calculation

#### Wind

#### Wind Chill (Calculated)

Source...... United States National Weather Service (NWS)/NOAA Equation Used . . . . . . . . . . Osczevski (1995) (adopted by US NWS in 2001)

Variables Used . . . . . . . . . . . . . . . . Instant Outside Temperature and 10-min. Avg. Wind Speed

Current Display Data . . . . . . . . . . . . . . . Instant Calculation

Current Graph Data . . . . . . . . Instant Calculation; Hourly, Daily and Monthly Low

Historical Graph Data. . . . . . . . . . . . . Hourly, Daily and Monthly Lows Alarm..... Low Threshold from Instant Calculation

Wind Direction

Current Graph Data . . . . . . . . . . . . . . . . . Instant Reading (user adjustable); 10-min. Dominant; Hourly, Daily,

Monthly Dominant

Monthly Dominants

Wind Speed

other units are converted from mph and rounded to nearest 1 km/hr, 0.1

m/s or 1 knot

length of cable from anemometer to ISS increases.)

Current Display Data . . . . . . . . . . . . . . . Instant

Current Graph Data . . . . . . . . . . Instant Reading; 10-minute and Hourly Average; Hourly High; Daily,

Monthly and Yearly High with Direction of High

Highs with Direction of Highs

High Thresholds from Instant Reading and 10-minute Average

# Calibration Certificate of Weather Station



# **Calibration Certificate**

## Certificate No.: CC0072106

#### 1. Description

a			
Calibration item :	a) Temperature b) Relative Humidity c) Wind Speed d) Wind Direction		
Equipment description :	Weather Station		
Manufacturer :	Davis Vantage Pro 2		
Type / Model No. :	6312CEU		
Serial No. :	AY170606003		
Assigned equipment no. :	N/A		
Adjustment :	N/A		
Remark :	Received with good condition		

#### 2. Customer information

Customer:	Castco Testing Centre Limited	
Address :	33, On Kui Street, Fanling, N.T.	
Date of receipt :	1 June 2021	

## 3. Date of performance of the calibration

Date of calibration :	7 June 2021
Date of Cambration .	7 Julie 2022

Approved Signatory

Company Chop: Certificate issue date: 9 June 2021

> CT-BEG-02 Page 1 of 4

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2. The certificate is issued subject to the latest Term and Condition, available assessable at our web site

Address: Room 2103, Technology Plaza, 29-35 Sha Tsui Road, Tsuen Wan, NT, Hong Kong
Tel: (852)25680106 Fax(852)30116194 Email: info@callab.com.hk Website:callab.com.hk



#### 4. Result of Calibration

Reference reading ; °C	Reading; °C	Error of indication; °C
15.0	16	1.0
20.0	20	0.0
25.0	25	0.0
30.0	30	0.0

Estimated expanded uncertainty: 1.0 °C

Technical Requirement: N/A

Note: The technical requirement is refer to JJF 1183-2007

CT-001-04

b) Relative Humidity

Temperature setting of humidity chamber: 23 °C

Reference reading ; % RH	Reading; % RH	Error of indication; % RH
40.0	42	2.0
50.0	51	1.0
70.0	68	-2.0

Estimated expanded uncertainty: 3 %RH

Technical Requirement: N/A

Note: The technical requirement is refer to JJG 1076-2001

CT-002-04 Page 2 of 4 cc0072106

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# Calibration Certificate of Weather Station



### c) Wind Speed

Reference reading ; m/s	Measured reading; m/s	Error of indication; %
0.0	0.0	N/A
2.0	1.9	-10.0
5.0	4.8	-4.0
8.0	7.8	-2.5

Estimated expanded uncertainty: 0.5 m/s

Technical Requirement: +/-5% or 1 m/s

#### a) Wind direction

Reference reading	Measured reading	Error of indication
0°	0°	0°
45°	45°	0°
90°	90°	0°
135°	135°	0°
180°	180°	0°
225°	225°	0°
270°	270°	0°
315°	315°	0°

Estimated expanded uncertainty: 5°

Technical Requirement: N/A

Note: The arrow head was adjusted to the magnetic north before performing calibration.

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Page 3 of 4 cc0072106

Cal Lab Limited



#### 5. Reference method for calibration

15 4400 2007
JF 1183-2007
JG 1076-2001
OP-251
OP-252

#### 6. Environment condition of calibration

Temperature ; °C	24.6 °C
Relative humidity; %RH	53 %RH

### 7. Reference equipment used in the calibration

Item	Model	Serial No.	Expiry date	Traceable to
Platinum resistance thermometer	KPPRHT-A-1	KCI I-1095, KCI P-1095	4 Mar 2022	SMQ
Humidity sensor	KPPRHT-A-1	KCI I-1095, KCI P-1095	4 Mar 2022	SMQ
Reference Anemometer	405-V1	41543692	1 Jan 2022	SMQ

The estimated expanded uncertainties have been calculated in "Evaluation and expression of uncertainty in measurement" and give an internal estimated to have a level of confidence of 95%. A coverage factor of 2 is assumed unless explicitly stated.

The standard (s) and instrument used in the calibration are traceable to national or international recognized

standard and are calibrated on a schedule to maintain the accuracy and good condition.

The result reported in this certificate refer to the condition of the instrument on the date of calibration and carry no implication regarding the long term stability of the instrument.

The result shows in this calibration certificate relate only to the item calibrated, and the result only applies to

the calibration item as received.

\*\*\* End of Certificate \*\*\*

CT-END-02

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Page 4 of 4 cc0072106

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# Appendix F – Weather information

# **General Information**

Date	Absolute Daily Min Temperature (°C)	Absolute Daily Max Temperature (°C)	Total Rainfall (mm)
01/11/2021	23.7	27.6	Trace
02/11/2021	24.1	27.9	Trace
03/11/2021	24.1	27.4	Trace
04/11/2021	24.1	27.9	0
05/11/2021	24.6	27.8	0
06/11/2021	24	29.2	0
07/11/2021	24.8	29	0
08/11/2021	18.1	25.3	2
09/11/2021	16.9	23	0
10/11/2021	17.8	24.7	0
11/11/2021	18.9	25	0
12/11/2021	20	25.7	0
13/11/2021	20.1	25.4	Trace
14/11/2021	19.3	24.7	0
15/11/2021	20.4	25.5	0
16/11/2021	21	26.3	0
17/11/2021	22	26.5	0
18/11/2021	20.2	25.8	0
19/11/2021	21.3	25.7	Trace
20/11/2021	22.4	26.1	0.3
21/11/2021	22.7	25.6	0
22/11/2021	16.8	23.3	3.5
23/11/2021	14.3	17.4	Trace
24/11/2021	16.9	22.1	0
25/11/2021	18.4	23.7	0
26/11/2021	18.6	24.8	0
27/11/2021	18.7	24.3	0
28/11/2021	19.2	24.5	0
29/11/2021	19.4	26.1	0
30/11/2021	17.1	24.6	0

NOTE1: The above weather information was obtained from manned weather station of Hong Kong Observatory.

NOTE2: Trace means rainfall less than 0.05 mm

 $\underline{https://www.hko.gov.hk/en/cis/dailyExtract.htm?y=2021\&m=11}$ 

Date	Time	Wind Speed (m/s)	Wind Direction												
01/11/2021	0:00	0.9	45	02/11/2021	0:00	1.3	45	03/11/2021	0:00	0.4	22.5	04/11/2021	0:00	1.8	90
01/11/2021	1:00	0.9	22.5	02/11/2021	1:00	1.3	67.5	03/11/2021	1:00	0.9	90	04/11/2021	1:00	1.3	112.5
01/11/2021	2:00	0.9	90	02/11/2021	2:00	1.3	90	03/11/2021	2:00	0.9	112.5	04/11/2021	2:00	1.3	112.5
01/11/2021	3:00	0.4	225	02/11/2021	3:00	0.9	90	03/11/2021	3:00	1.3	112.5	04/11/2021	3:00	1.3	90
01/11/2021	4:00	1.3	225	02/11/2021	4:00	1.8	90	03/11/2021	4:00	1.3	135	04/11/2021	4:00	1.3	90
01/11/2021	5:00	1.8	22.5	02/11/2021	5:00	1.3	90	03/11/2021	5:00	1.3	112.5	04/11/2021	5:00	1.3	90
01/11/2021	6:00	0.9	337.5	02/11/2021	6:00	2.2	112.5	03/11/2021	6:00	0.9	112.5	04/11/2021	6:00	0.9	112.5
01/11/2021	7:00	0.9	337.5	02/11/2021	7:00	1.8	112.5	03/11/2021	7:00	1.3	112.5	04/11/2021	7:00	0.9	112.5
01/11/2021	8:00	0.9	112.5	02/11/2021	8:00	2.2	90	03/11/2021	8:00	0.9	90	04/11/2021	8:00	0.9	112.5
01/11/2021	9:00	1.3	112.5	02/11/2021	9:00	1.3	112.5	03/11/2021	9:00	0.9	135	04/11/2021	9:00	1.3	67.5
01/11/2021	10:00	0.9	112.5	02/11/2021	10:00	1.3	135	03/11/2021	10:00	0.9	90	04/11/2021	10:00	0.9	157.5
01/11/2021	11:00	1.3	22.5	02/11/2021	11:00	1.8	112.5	03/11/2021	11:00	1.8	22.5	04/11/2021	11:00	0.9	90
01/11/2021	12:00	1.8	112.5	02/11/2021	12:00	2.2	90	03/11/2021	12:00	1.3	112.5	04/11/2021	12:00	0.9	112.5
01/11/2021	13:00	1.8	90	02/11/2021	13:00	2.2	90	03/11/2021	13:00	1.3	45	04/11/2021	13:00	1.8	112.5
01/11/2021	14:00	0.9	90	02/11/2021	14:00	1.8	112.5	03/11/2021	14:00	1.8	112.5	04/11/2021	14:00	0.9	112.5
01/11/2021	15:00	0.9	112.5	02/11/2021	15:00	1.3	90	03/11/2021	15:00	0.9	45	04/11/2021	15:00	1.3	90
01/11/2021	16:00	1.3	112.5	02/11/2021	16:00	1.3	67.5	03/11/2021	16:00	0.9	45	04/11/2021	16:00	1.8	112.5
01/11/2021	17:00	1.3	112.5	02/11/2021	17:00	1.3	67.5	03/11/2021	17:00	0.9	90	04/11/2021	17:00	1.8	90
01/11/2021	18:00	0.9	90	02/11/2021	18:00	0.9	22.5	03/11/2021	18:00	1.3	135	04/11/2021	18:00	1.3	112.5
01/11/2021	19:00	0.9	90	02/11/2021	19:00	0.9	22.5	03/11/2021	19:00	0.9	112.5	04/11/2021	19:00	0.9	90
01/11/2021	20:00	0.4	270	02/11/2021	20:00	0.9	90	03/11/2021	20:00	0.9	112.5	04/11/2021	20:00	0.9	112.5
01/11/2021	21:00	0.9	112.5	02/11/2021	21:00	1.3	90	03/11/2021	21:00	0.9	157.5	04/11/2021	21:00	0.9	135
01/11/2021	22:00	0.9	67.5	02/11/2021	22:00	0.9	112.5	03/11/2021	22:00	1.8	112.5	04/11/2021	22:00	1.3	112.5
01/11/2021	23:00	0.9	112.5	02/11/2021	23:00	0.9	112.5	03/11/2021	23:00	1.8	112.5	04/11/2021	23:00	1.3	112.5

Date	Time	Wind Speed (m/s)	Wind Direction												
05/11/2021	0:00	0.4	112.5	06/11/2021	0:00	0.9	270	07/11/2021	0:00	0.9	112.5	08/11/2021	0:00	1.8	22.5
05/11/2021	1:00	0.4	112.5	06/11/2021	1:00	1.8	247.5	07/11/2021	1:00	0.9	112.5	08/11/2021	1:00	1.8	22.5
05/11/2021	2:00	0.9	135	06/11/2021	2:00	1.8	247.5	07/11/2021	2:00	1.3	90	08/11/2021	2:00	1.3	157.5
05/11/2021	3:00	0.9	135	06/11/2021	3:00	0.4	112.5	07/11/2021	3:00	0.9	67.5	08/11/2021	3:00	0.9	22.5
05/11/2021	4:00	0.4	135	06/11/2021	4:00	0.4	90	07/11/2021	4:00	0.9	112.5	08/11/2021	4:00	0.9	22.5
05/11/2021	5:00	0.4	135	06/11/2021	5:00	0.4	67.5	07/11/2021	5:00	0.9	90	08/11/2021	5:00	1.3	45
05/11/2021	6:00	0.4	112.5	06/11/2021	6:00	0.4	90	07/11/2021	6:00	0.9	112.5	08/11/2021	6:00	1.3	45
05/11/2021	7:00	0.4	112.5	06/11/2021	7:00	0.9	90	07/11/2021	7:00	1.3	90	08/11/2021	7:00	1.3	112.5
05/11/2021	8:00	0.4	112.5	06/11/2021	8:00	0.9	135	07/11/2021	8:00	1.3	202.5	08/11/2021	8:00	1.3	45
05/11/2021	9:00	0.4	112.5	06/11/2021	9:00	0.9	135	07/11/2021	9:00	0.9	22.5	08/11/2021	9:00	1.3	22.5
05/11/2021	10:00	0.4	112.5	06/11/2021	10:00	0.9	112.5	07/11/2021	10:00	0.9	180	08/11/2021	10:00	0.9	292.5
05/11/2021	11:00	1.3	112.5	06/11/2021	11:00	0.9	112.5	07/11/2021	11:00	0.9	270	08/11/2021	11:00	0.9	292.5
05/11/2021	12:00	1.3	135	06/11/2021	12:00	0.9	112.5	07/11/2021	12:00	0.9	292.5	08/11/2021	12:00	0.9	315
05/11/2021	13:00	0.9	225	06/11/2021	13:00	0.9	112.5	07/11/2021	13:00	0.4	270	08/11/2021	13:00	1.8	45
05/11/2021	14:00	0.4	225	06/11/2021	14:00	0.9	202.5	07/11/2021	14:00	0.9	112.5	08/11/2021	14:00	0.9	67.5
05/11/2021	15:00	0.4	202.5	06/11/2021	15:00	0.9	202.5	07/11/2021	15:00	0.9	67.5	08/11/2021	15:00	0.9	67.5
05/11/2021	16:00	1.3	247.5	06/11/2021	16:00	0.9	202.5	07/11/2021	16:00	0.9	270	08/11/2021	16:00	1.3	45
05/11/2021	17:00	1.3	247.5	06/11/2021	17:00	1.3	225	07/11/2021	17:00	1.3	157.5	08/11/2021	17:00	0.4	225
05/11/2021	18:00	0.9	225	06/11/2021	18:00	1.3	225	07/11/2021	18:00	1.3	45	08/11/2021	18:00	0.4	337.5
05/11/2021	19:00	1.3	247.5	06/11/2021	19:00	0.9	225	07/11/2021	19:00	1.3	337.5	08/11/2021	19:00	0.4	270
05/11/2021	20:00	1.3	247.5	06/11/2021	20:00	1.3	90	07/11/2021	20:00	1.8	270	08/11/2021	20:00	0.9	135
05/11/2021	21:00	1.8	270	06/11/2021	21:00	1.8	90	07/11/2021	21:00	1.3	135	08/11/2021	21:00	1.3	112.5
05/11/2021	22:00	1.8	247.5	06/11/2021	22:00	1.3	135	07/11/2021	22:00	1.8	270	08/11/2021	22:00	0.4	112.5
05/11/2021	23:00	1.3	247.5	06/11/2021	23:00	0.9	112.5	07/11/2021	23:00	0.9	112.5	08/11/2021	23:00	0.9	22.5

Date	Time	Wind Speed (m/s)	Wind Direction												
09/11/2021	0:00	0.9	112.5	10/11/2021	0:00	0.9	90	11/11/2021	0:00	0.4	112.5	12/11/2021	0:00	0.9	112.5
09/11/2021	1:00	0.4	135	10/11/2021	1:00	1.3	112.5	11/11/2021	1:00	0.9	112.5	12/11/2021	1:00	1.3	112.5
09/11/2021	2:00	0.4	135	10/11/2021	2:00	0.9	112.5	11/11/2021	2:00	0.4	90	12/11/2021	2:00	1.3	112.5
09/11/2021	3:00	0.4	157.5	10/11/2021	3:00	0.9	112.5	11/11/2021	3:00	1.3	112.5	12/11/2021	3:00	1.3	135
09/11/2021	4:00	0.9	135	10/11/2021	4:00	0.9	112.5	11/11/2021	4:00	1.3	112.5	12/11/2021	4:00	1.3	112.5
09/11/2021	5:00	0.4	315	10/11/2021	5:00	0.9	90	11/11/2021	5:00	0.9	112.5	12/11/2021	5:00	1.3	112.5
09/11/2021	6:00	0.4	337.5	10/11/2021	6:00	1.3	112.5	11/11/2021	6:00	0.4	112.5	12/11/2021	6:00	0.9	112.5
09/11/2021	7:00	0.9	247.5	10/11/2021	7:00	0.9	112.5	11/11/2021	7:00	0.4	22.5	12/11/2021	7:00	1.3	112.5
09/11/2021	8:00	0.9	22.5	10/11/2021	8:00	0.9	90	11/11/2021	8:00	0.4	67.5	12/11/2021	8:00	0.9	112.5
09/11/2021	9:00	0.4	225	10/11/2021	9:00	0.4	67.5	11/11/2021	9:00	0.9	112.5	12/11/2021	9:00	0.4	135
09/11/2021	10:00	0.9	112.5	10/11/2021	10:00	0.4	22.5	11/11/2021	10:00	0.9	90	12/11/2021	10:00	0.9	337.5
09/11/2021	11:00	0.4	67.5	10/11/2021	11:00	0.9	292.5	11/11/2021	11:00	0.9	67.5	12/11/2021	11:00	0.4	135
09/11/2021	12:00	0.9	22.5	10/11/2021	12:00	0.9	315	11/11/2021	12:00	0.4	112.5	12/11/2021	12:00	0.4	247.5
09/11/2021	13:00	1.3	45	10/11/2021	13:00	0.9	67.5	11/11/2021	13:00	0.9	90	12/11/2021	13:00	0.9	22.5
09/11/2021	14:00	1.3	22.5	10/11/2021	14:00	1.3	112.5	11/11/2021	14:00	0.4	90	12/11/2021	14:00	0	112.5
09/11/2021	15:00	0.4	337.5	10/11/2021	15:00	1.3	112.5	11/11/2021	15:00	0.4	22.5	12/11/2021	15:00	0	135
09/11/2021	16:00	0.4	225	10/11/2021	16:00	1.8	112.5	11/11/2021	16:00	0.9	45	12/11/2021	16:00	0	337.5
09/11/2021	17:00	1.3	292.5	10/11/2021	17:00	1.3	337.5	11/11/2021	17:00	0.4	45	12/11/2021	17:00	0	112.5
09/11/2021	18:00	1.3	22.5	10/11/2021	18:00	0.9	337.5	11/11/2021	18:00	0.4	247.5	12/11/2021	18:00	0.4	112.5
09/11/2021	19:00	0.9	22.5	10/11/2021	19:00	1.3	292.5	11/11/2021	19:00	0.4	112.5	12/11/2021	19:00	0.4	22.5
09/11/2021	20:00	0.9	135	10/11/2021	20:00	0.9	292.5	11/11/2021	20:00	0.9	90	12/11/2021	20:00	0.4	112.5
09/11/2021	21:00	0.9	315	10/11/2021	21:00	0.9	202.5	11/11/2021	21:00	0.9	112.5	12/11/2021	21:00	0.4	22.5
09/11/2021	22:00	1.3	112.5	10/11/2021	22:00	1.3	247.5	11/11/2021	22:00	0.9	112.5	12/11/2021	22:00	0.4	112.5
09/11/2021	23:00	0.9	22.5	10/11/2021	23:00	1.3	247.5	11/11/2021	23:00	1.3	90	12/11/2021	23:00	0.4	22.5

Date	Time	Wind Speed (m/s)	Wind Direction												
13/11/2021	0:00	0.9	22.5	14/11/2021	0:00	0.9	112.5	15/11/2021	0:00	1.3	112.5	16/11/2021	0:00	0.4	135
13/11/2021	1:00	0.9	157.5	14/11/2021	1:00	0.9	292.5	15/11/2021	1:00	1.3	112.5	16/11/2021	1:00	0.4	112.5
13/11/2021	2:00	1.3	247.5	14/11/2021	2:00	1.3	112.5	15/11/2021	2:00	0.9	90	16/11/2021	2:00	0.4	112.5
13/11/2021	3:00	1.3	135	14/11/2021	3:00	0.9	90	15/11/2021	3:00	0.9	90	16/11/2021	3:00	0.4	112.5
13/11/2021	4:00	1.8	135	14/11/2021	4:00	0.9	112.5	15/11/2021	4:00	1.3	90	16/11/2021	4:00	0.4	135
13/11/2021	5:00	1.8	135	14/11/2021	5:00	0.9	135	15/11/2021	5:00	2.2	112.5	16/11/2021	5:00	0.4	112.5
13/11/2021	6:00	1.3	135	14/11/2021	6:00	0.9	90	15/11/2021	6:00	1.3	90	16/11/2021	6:00	0.4	112.5
13/11/2021	7:00	1.3	67.5	14/11/2021	7:00	0.4	112.5	15/11/2021	7:00	1.8	112.5	16/11/2021	7:00	0.4	112.5
13/11/2021	8:00	0.9	247.5	14/11/2021	8:00	0.4	112.5	15/11/2021	8:00	1.3	112.5	16/11/2021	8:00	0.4	112.5
13/11/2021	9:00	0.4	337.5	14/11/2021	9:00	0.4	112.5	15/11/2021	9:00	1.3	112.5	16/11/2021	9:00	0.4	315
13/11/2021	10:00	0.4	45	14/11/2021	10:00	0.9	90	15/11/2021	10:00	0.9	112.5	16/11/2021	10:00	0.4	337.5
13/11/2021	11:00	0.4	337.5	14/11/2021	11:00	0.9	22.5	15/11/2021	11:00	0.4	90	16/11/2021	11:00	0.4	112.5
13/11/2021	12:00	0.9	337.5	14/11/2021	12:00	1.8	292.5	15/11/2021	12:00	0.9	45	16/11/2021	12:00	0.9	90
13/11/2021	13:00	0.4	90	14/11/2021	13:00	1.3	247.5	15/11/2021	13:00	0.9	22.5	16/11/2021	13:00	0.4	112.5
13/11/2021	14:00	0.4	112.5	14/11/2021	14:00	0.4	112.5	15/11/2021	14:00	0.4	22.5	16/11/2021	14:00	0.9	112.5
13/11/2021	15:00	0.9	112.5	14/11/2021	15:00	2.2	45	15/11/2021	15:00	0.9	90	16/11/2021	15:00	0.9	90
13/11/2021	16:00	0.4	112.5	14/11/2021	16:00	1.3	315	15/11/2021	16:00	0.4	90	16/11/2021	16:00	0.4	90
13/11/2021	17:00	0.9	0	14/11/2021	17:00	0.9	112.5	15/11/2021	17:00	0.4	22.5	16/11/2021	17:00	0.4	112.5
13/11/2021	18:00	0.9	0	14/11/2021	18:00	1.3	247.5	15/11/2021	18:00	0.9	45	16/11/2021	18:00	0.9	112.5
13/11/2021	19:00	0.9	0	14/11/2021	19:00	0.9	45	15/11/2021	19:00	0.9	135	16/11/2021	19:00	1.3	90
13/11/2021	20:00	1.3	67.5	14/11/2021	20:00	0.9	90	15/11/2021	20:00	0.4	112.5	16/11/2021	20:00	1.3	90
13/11/2021	21:00	0.9	180	14/11/2021	21:00	0.9	90	15/11/2021	21:00	0.9	112.5	16/11/2021	21:00	0.9	112.5
13/11/2021	22:00	0.9	45	14/11/2021	22:00	0.9	292.5	15/11/2021	22:00	0.9	112.5	16/11/2021	22:00	0.9	112.5
13/11/2021	23:00	0.9	22.5	14/11/2021	23:00	0.9	337.5	15/11/2021	23:00	0.4	22.5	16/11/2021	23:00	0.9	337.5

Date	Time	Wind Speed (m/s)	Wind Direction												
17/11/2021	0:00	0.4	202.5	18/11/2021	0:00	0.9	112.5	19/11/2021	0:00	0.9	225	20/11/2021	0:00	1.8	90
17/11/2021	1:00	0.9	112.5	18/11/2021	1:00	0.9	112.5	19/11/2021	1:00	1.3	112.5	20/11/2021	1:00	1.8	112.5
17/11/2021	2:00	0.4	180	18/11/2021	2:00	0.9	90	19/11/2021	2:00	0.9	270	20/11/2021	2:00	1.8	112.5
17/11/2021	3:00	0.4	180	18/11/2021	3:00	1.3	112.5	19/11/2021	3:00	1.3	67.5	20/11/2021	3:00	1.8	90
17/11/2021	4:00	0.9	112.5	18/11/2021	4:00	0.9	112.5	19/11/2021	4:00	0.9	45	20/11/2021	4:00	2.2	90
17/11/2021	5:00	1.3	112.5	18/11/2021	5:00	0.9	135	19/11/2021	5:00	0.9	90	20/11/2021	5:00	2.2	90
17/11/2021	6:00	1.3	112.5	18/11/2021	6:00	0.9	135	19/11/2021	6:00	1.8	112.5	20/11/2021	6:00	0.9	67.5
17/11/2021	7:00	0.9	112.5	18/11/2021	7:00	0.9	135	19/11/2021	7:00	1.8	112.5	20/11/2021	7:00	1.8	45
17/11/2021	8:00	0.9	135	18/11/2021	8:00	0.4	112.5	19/11/2021	8:00	1.8	22.5	20/11/2021	8:00	0.9	90
17/11/2021	9:00	0.9	135	18/11/2021	9:00	0.9	112.5	19/11/2021	9:00	1.8	135	20/11/2021	9:00	1.8	112.5
17/11/2021	10:00	0.9	247.5	18/11/2021	10:00	0	135	19/11/2021	10:00	1.8	112.5	20/11/2021	10:00	1.3	112.5
17/11/2021	11:00	0.4	225	18/11/2021	11:00	0	135	19/11/2021	11:00	2.2	270	20/11/2021	11:00	0.9	112.5
17/11/2021	12:00	0.4	157.5	18/11/2021	12:00	0	135	19/11/2021	12:00	1.8	67.5	20/11/2021	12:00	0.9	45
17/11/2021	13:00	0.4	202.5	18/11/2021	13:00	0	135	19/11/2021	13:00	1.3	22.5	20/11/2021	13:00	0.9	67.5
17/11/2021	14:00	0.9	202.5	18/11/2021	14:00	0.4	22.5	19/11/2021	14:00	0.9	90	20/11/2021	14:00	0.9	90
17/11/2021	15:00	0.4	45	18/11/2021	15:00	0.4	22.5	19/11/2021	15:00	1.8	67.5	20/11/2021	15:00	1.8	45
17/11/2021	16:00	0.4	112.5	18/11/2021	16:00	0.4	22.5	19/11/2021	16:00	2.2	112.5	20/11/2021	16:00	1.3	22.5
17/11/2021	17:00	0	225	18/11/2021	17:00	0.9	22.5	19/11/2021	17:00	1.8	90	20/11/2021	17:00	1.3	45
17/11/2021	18:00	0.4	270	18/11/2021	18:00	0.9	90	19/11/2021	18:00	1.8	90	20/11/2021	18:00	1.3	90
17/11/2021	19:00	0.9	157.5	18/11/2021	19:00	0.9	90	19/11/2021	19:00	1.3	67.5	20/11/2021	19:00	0.9	67.5
17/11/2021	20:00	0.4	112.5	18/11/2021	20:00	0.9	90	19/11/2021	20:00	0.9	67.5	20/11/2021	20:00	0.9	90
17/11/2021	21:00	0.4	157.5	18/11/2021	21:00	1.3	112.5	19/11/2021	21:00	0.9	90	20/11/2021	21:00	0.9	112.5
17/11/2021	22:00	0.4	112.5	18/11/2021	22:00	0.9	112.5	19/11/2021	22:00	1.3	112.5	20/11/2021	22:00	1.3	90
17/11/2021	23:00	0.4	135	18/11/2021	23:00	0.4	67.5	19/11/2021	23:00	1.3	112.5	20/11/2021	23:00	1.3	112.5

Date	Time	Wind Speed (m/s)	Wind Direction												
21/11/2021	0:00	1.3	112.5	22/11/2021	0:00	0.9	315	23/11/2021	0:00	1.3	22.5	24/11/2021	0:00	0.9	90
21/11/2021	1:00	1.3	112.5	22/11/2021	1:00	0.9	112.5	23/11/2021	1:00	0.9	22.5	24/11/2021	1:00	0.9	90
21/11/2021	2:00	0.9	112.5	22/11/2021	2:00	1.3	337.5	23/11/2021	2:00	0.9	202.5	24/11/2021	2:00	1.3	112.5
21/11/2021	3:00	0.4	90	22/11/2021	3:00	1.3	90	23/11/2021	3:00	0.9	22.5	24/11/2021	3:00	0.9	112.5
21/11/2021	4:00	0.4	112.5	22/11/2021	4:00	0.9	337.5	23/11/2021	4:00	0.9	337.5	24/11/2021	4:00	0.9	90
21/11/2021	5:00	0.4	112.5	22/11/2021	5:00	1.3	315	23/11/2021	5:00	0.4	22.5	24/11/2021	5:00	0.4	112.5
21/11/2021	6:00	0.9	112.5	22/11/2021	6:00	1.3	315	23/11/2021	6:00	0.9	315	24/11/2021	6:00	0	22.5
21/11/2021	7:00	0.9	112.5	22/11/2021	7:00	1.3	90	23/11/2021	7:00	0.9	225	24/11/2021	7:00	0	22.5
21/11/2021	8:00	0.9	90	22/11/2021	8:00	0.9	67.5	23/11/2021	8:00	0.4	180	24/11/2021	8:00	0	22.5
21/11/2021	9:00	1.3	90	22/11/2021	9:00	0.9	135	23/11/2021	9:00	0.4	45	24/11/2021	9:00	0.4	45
21/11/2021	10:00	0.9	112.5	22/11/2021	10:00	0.9	337.5	23/11/2021	10:00	0.4	22.5	24/11/2021	10:00	0	22.5
21/11/2021	11:00	0.9	135	22/11/2021	11:00	1.3	45	23/11/2021	11:00	0.4	67.5	24/11/2021	11:00	0.4	45
21/11/2021	12:00	0.9	45	22/11/2021	12:00	1.3	22.5	23/11/2021	12:00	0.4	45	24/11/2021	12:00	0.4	67.5
21/11/2021	13:00	1.3	22.5	22/11/2021	13:00	0.9	337.5	23/11/2021	13:00	0	112.5	24/11/2021	13:00	0.4	337.5
21/11/2021	14:00	1.3	22.5	22/11/2021	14:00	0.9	315	23/11/2021	14:00	0	112.5	24/11/2021	14:00	0.4	337.5
21/11/2021	15:00	1.3	22.5	22/11/2021	15:00	1.3	45	23/11/2021	15:00	0	112.5	24/11/2021	15:00	0.4	337.5
21/11/2021	16:00	1.3	45	22/11/2021	16:00	1.3	247.5	23/11/2021	16:00	0.4	247.5	24/11/2021	16:00	0.4	337.5
21/11/2021	17:00	1.8	292.5	22/11/2021	17:00	0.9	270	23/11/2021	17:00	0.4	247.5	24/11/2021	17:00	0.9	247.5
21/11/2021	18:00	1.3	247.5	22/11/2021	18:00	0.9	247.5	23/11/2021	18:00	0.4	225	24/11/2021	18:00	0.4	247.5
21/11/2021	19:00	1.3	135	22/11/2021	19:00	0.9	112.5	23/11/2021	19:00	0	22.5	24/11/2021	19:00	0.4	22.5
21/11/2021	20:00	0.9	292.5	22/11/2021	20:00	0.9	337.5	23/11/2021	20:00	1.3	337.5	24/11/2021	20:00	0.4	22.5
21/11/2021	21:00	1.3	247.5	22/11/2021	21:00	0.4	67.5	23/11/2021	21:00	1.3	22.5	24/11/2021	21:00	0.4	22.5
21/11/2021	22:00	2.2	292.5	22/11/2021	22:00	0.4	90	23/11/2021	22:00	0.9	337.5	24/11/2021	22:00	0.9	112.5
21/11/2021	23:00	0.9	22.5	22/11/2021	23:00	0.4	180	23/11/2021	23:00	0.9	90	24/11/2021	23:00	0.4	22.5

Date	Time	Wind Speed (m/s)	Wind Direction												
25/11/2021	0:00	1.3	90	26/11/2021	0:00	1.3	112.5	27/11/2021	0:00	0.9	112.5	28/11/2021	0:00	0.4	112.5
25/11/2021	1:00	1.3	112.5	26/11/2021	1:00	0.9	90	27/11/2021	1:00	0.9	90	28/11/2021	1:00	0.4	90
25/11/2021	2:00	0.9	135	26/11/2021	2:00	0.4	90	27/11/2021	2:00	0.9	112.5	28/11/2021	2:00	0.4	90
25/11/2021	3:00	1.3	135	26/11/2021	3:00	0.4	112.5	27/11/2021	3:00	0.9	90	28/11/2021	3:00	0.4	112.5
25/11/2021	4:00	0.9	112.5	26/11/2021	4:00	0.4	112.5	27/11/2021	4:00	0.9	112.5	28/11/2021	4:00	0.4	112.5
25/11/2021	5:00	0.9	112.5	26/11/2021	5:00	0.4	112.5	27/11/2021	5:00	0.9	112.5	28/11/2021	5:00	0.9	112.5
25/11/2021	6:00	1.3	112.5	26/11/2021	6:00	0.4	112.5	27/11/2021	6:00	0.4	292.5	28/11/2021	6:00	0.4	112.5
25/11/2021	7:00	1.3	112.5	26/11/2021	7:00	0.4	67.5	27/11/2021	7:00	0.4	112.5	28/11/2021	7:00	0.4	112.5
25/11/2021	8:00	0.9	67.5	26/11/2021	8:00	0.9	22.5	27/11/2021	8:00	0.4	45	28/11/2021	8:00	0.9	90
25/11/2021	9:00	0.4	90	26/11/2021	9:00	0.9	112.5	27/11/2021	9:00	0.4	67.5	28/11/2021	9:00	0.4	90
25/11/2021	10:00	0.4	22.5	26/11/2021	10:00	0.4	22.5	27/11/2021	10:00	0.4	22.5	28/11/2021	10:00	1.3	22.5
25/11/2021	11:00	0.4	22.5	26/11/2021	11:00	0.9	22.5	27/11/2021	11:00	0.4	292.5	28/11/2021	11:00	1.8	45
25/11/2021	12:00	0.4	67.5	26/11/2021	12:00	0.9	22.5	27/11/2021	12:00	1.3	112.5	28/11/2021	12:00	1.3	67.5
25/11/2021	13:00	0.4	67.5	26/11/2021	13:00	1.3	315	27/11/2021	13:00	0.9	67.5	28/11/2021	13:00	0.9	337.5
25/11/2021	14:00	0.9	67.5	26/11/2021	14:00	0.9	315	27/11/2021	14:00	0.9	315	28/11/2021	14:00	0.9	337.5
25/11/2021	15:00	0.9	67.5	26/11/2021	15:00	0.9	315	27/11/2021	15:00	0.9	337.5	28/11/2021	15:00	0.9	337.5
25/11/2021	16:00	1.3	45	26/11/2021	16:00	0.4	337.5	27/11/2021	16:00	1.3	112.5	28/11/2021	16:00	0.9	337.5
25/11/2021	17:00	0.4	45	26/11/2021	17:00	0.4	315	27/11/2021	17:00	0.9	90	28/11/2021	17:00	0.9	315
25/11/2021	18:00	0.9	45	26/11/2021	18:00	0.4	67.5	27/11/2021	18:00	0.9	157.5	28/11/2021	18:00	0.4	315
25/11/2021	19:00	0.4	90	26/11/2021	19:00	0.9	90	27/11/2021	19:00	0.9	315	28/11/2021	19:00	0.4	135
25/11/2021	20:00	0.4	67.5	26/11/2021	20:00	0.4	90	27/11/2021	20:00	135	315	28/11/2021	20:00	0.4	22.5
25/11/2021	21:00	0.4	112.5	26/11/2021	21:00	1.3	90	27/11/2021	21:00	90	112.5	28/11/2021	21:00	0.4	112.5
25/11/2021	22:00	0.9	112.5	26/11/2021	22:00	2.2	112.5	27/11/2021	22:00	135	135	28/11/2021	22:00	0.9	112.5
25/11/2021	23:00	0.9	67.5	26/11/2021	23:00	2.2	90	27/11/2021	23:00	135	90	28/11/2021	23:00	1.3	270

Mean Wind Speed and Wind Direction recorded by the weather station setup at the rooftop of Hong Kong Children's Hospital

Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction	Date	Time	Wind Speed (m/s)	Wind Direction
29/11/2021	0:00	0.4	135	30/11/2021	0:00	0.9	67.5								
29/11/2021	1:00	0.4	157.5	30/11/2021	1:00	0.9	67.5								
29/11/2021	2:00	0.4	157.5	30/11/2021	2:00	0.9	225								
29/11/2021	3:00	0.9	135	30/11/2021	3:00	0.9	90								
29/11/2021	4:00	0.4	247.5	30/11/2021	4:00	0.9	112.5								
29/11/2021	5:00	0.4	247.5	30/11/2021	5:00	1.3	90								
29/11/2021	6:00	0.9	225	30/11/2021	6:00	0.9	45								
29/11/2021	7:00	0.9	225	30/11/2021	7:00	0	22.5								
29/11/2021	8:00	0.9	112.5	30/11/2021	8:00	0	22.5								
29/11/2021	9:00	0.9	112.5	30/11/2021	9:00	1.3	112.5								
29/11/2021	10:00	0.4	112.5	30/11/2021	10:00	2.2	67.5								
29/11/2021	11:00	0.4	112.5	30/11/2021	11:00	1.8	22.5								
29/11/2021	12:00	0.9	135	30/11/2021	12:00	1.8	67.5								
29/11/2021	13:00	0.4	135	30/11/2021	13:00	0.9	315								
29/11/2021	14:00	0.4	247.5	30/11/2021	14:00	1.3	270								
29/11/2021	15:00	0.9	315	30/11/2021	15:00	1.3	315								
29/11/2021	16:00	0.9	45	30/11/2021	16:00	1.3	135								
29/11/2021	17:00	0.9	45	30/11/2021	17:00	1.8	67.5								
29/11/2021	18:00	0.9	247.5	30/11/2021	18:00	1.8	90								
29/11/2021	19:00	0.9	247.5	30/11/2021	19:00	1.3	292.5								
29/11/2021	20:00	1.3	337.5	30/11/2021	20:00	1.8	225								
29/11/2021	21:00	0.9	270	30/11/2021	21:00	1.3	135								
29/11/2021	22:00	1.3	90	30/11/2021	22:00	1.3	157.5								
29/11/2021	23:00	0.9	225	30/11/2021	23:00	1.3	247.5								

Appendix G-24-hr TSP monitoring results and graphical presentation

Location: AM3 – Sky Tower

Start Date	Weather	Air Temp.	Atmospheric Pressure	Filter we	eight (g)	Particulate	Elapse	e Time	Sampling Time	Flow (cf		Av. Flow	Total vol.	Conc.
		$(^{\circ}C)$	(hPa)	Initial	Final	weight (g)	Initial	Final	(min)	Initial	Final	(m³/min)	$(m^3)$	$(\mu g/m^3)$
03/11/2021	Sunny	26.3	1016.7	15.0878	15.2673	0.1795	3677.82	3701.84	1441	54	54	1.52	2186	82
09/11/2021	Sunny	23.9	1019.3	15.0728	15.2004	0.1276	3702.64	3726.66	1441	54	54	1.52	2198	58
15/11/2021	Sunny	24.6	1017.2	18.0133	18.1773	0.1640	3727.17	3751.19	1441	54	54	1.52	2193	75
20/11/2021	Sunny	25.1	1012.9	15.6456	15.8253	0.1797	3752.97	3776.99	1441	56	56	1.58	2281	79
26/11/2021	Sunny	23.2	1018.4	15.5994	15.7729	0.1735	3778.04	3802.06	1441	56	56	1.59	2295	76
												Maxin	num	82
												Minin	num	58
												Aver	age	74
												Action	Level	182
												Limit I	Level	260

Location: AM4(A) – The Hong Kong Society for the Blind's Factory cum Sheltered Workshop

Start Date	Weather	Air Temp.	Atmospheric Pressure	Filter we	eight (g)	Particulate	Elapse	e Time	Sampling Time	Flow (cf		Av. Flow	Total vol.	Conc.
		$(^{\circ}C)$	(hPa)	Initial	Final	weight (g)	Initial	Final	(min)	Initial	Final	(m <sup>3</sup> /min)	$(m^3)$	$(\mu g/m^3)$
03/11/2021	Sunny	26.3	1016.7	15.2473	15.4332	0.1859	3312.64	3336.65	1441	50	50	1.34	1927	96
09/11/2021	Sunny	23.9	1019.3	15.3093	15.4478	0.1385	3336.84	3360.86	1441	50	50	1.35	1938	71
15/11/2021	Sunny	24.6	1017.2	15.2404	15.4151	0.1747	3362.72	3386.74	1441	50	50	1.34	1934	90
20/11/2021	Sunny	25.1	1012.9	18.1936	18.3554	0.1618	3387.88	3411.89	1441	50	50	1.34	1933	84
26/11/2021	Sunny	23.2	1018.4	15.4265	15.5663	0.1398	3412.88	3436.91	1442	50	50	1.35	1946	72
												Maxin	num	96
												Minin	num	71
												Aver	age	83
												Action	Level	187
												Limit I	Level	260

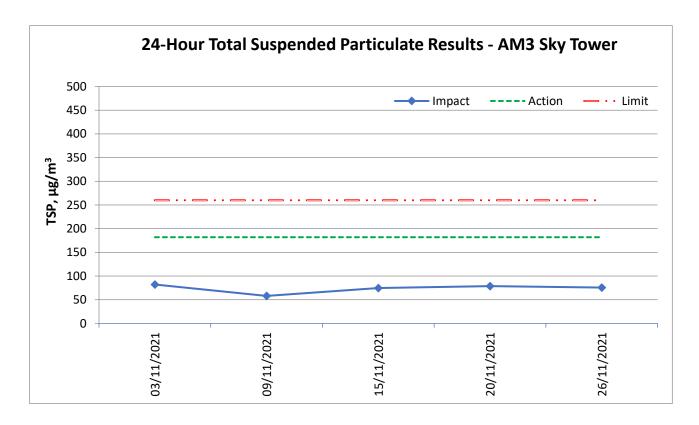
## Location: AM7 – Hong Kong Children's Hospital

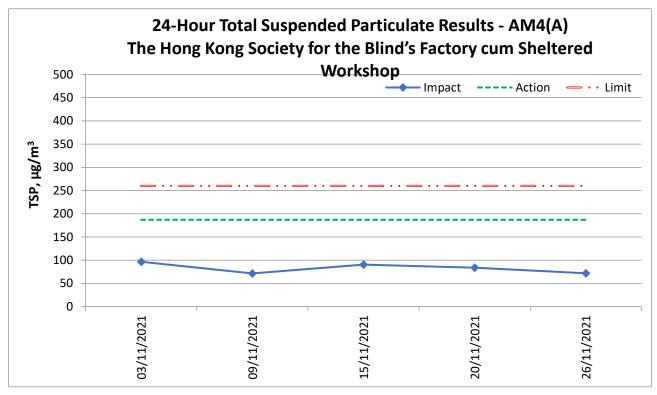
Start Date	Weather	Air Temp.	Atmospheric Pressure	Filter we	eight (g)	Particulate	Elapse	e Time	Sampling Time	Flow (cf		Av. Flow	Total vol.	Conc.
		(℃)	(hPa)	Initial	Final	weight (g)	Initial	Final	(min)	Initial	Final	(m³/min)	$(m^3)$	$(\mu g/m^3)$
03/11/2021	Sunny	26.3	1016.7	15.2289	15.3591	0.1302	8205.17	8229.19	1441	48	48	1.29	1853	70
09/11/2021	Sunny	23.9	1019.3	18.2985	18.4218	0.1233	8230.02	8254.04	1441	48	48	1.29	1863	66
15/11/2021	Sunny	24.6	1017.2	15.2311	15.3422	0.1111	8255.14	8279.16	1441	48	48	1.29	1859	60
20/11/2021	Sunny	25.1	1012.9	18.5281	18.6402	0.1121	8279.25	8303.27	1441	48	48	1.34	1937	58
26/11/2021	Sunny	23.2	1018.4	15.4465	15.6126	0.1661	8303.57	8327.59	1441	48	48	1.35	1948	85
												Maxin	num	85
												Minim	num	58
												Avera	age	68
												Action 1	Level	181

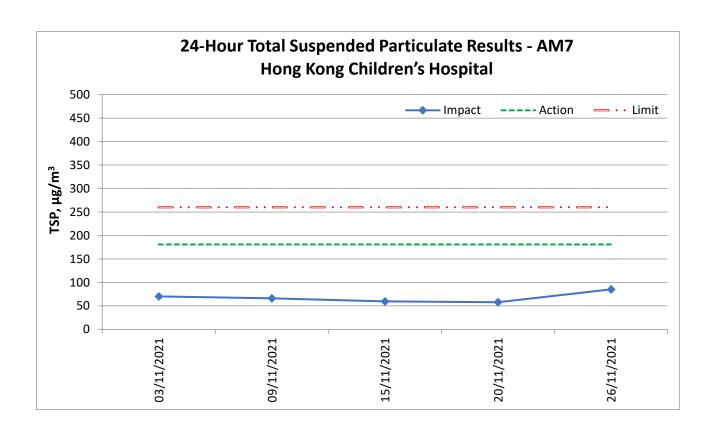
Limit Level

260

## 24-hour average TSP







$\label{eq:Appendix H-1-hr} \textbf{Appendix H-1-hr TSP monitoring results and graphical presentation}$

Location:
AM3 Sky Tower

Date	Measure	emei	nt Period	1-hr TSP concentration, μg/m <sup>3</sup>	Weather	
	9:00	-	10:00	61		
03/11/2021	10:00	-	11:00	62	Sunny	
	11:00	-	12:00	65		
	13:00	-	14:00	47		
09/11/2021	14:00	-	15:00	42	Sunny	
	15:00	-	16:00	42		
	9:00	-	10:00	52		
15/11/2021	10:00	-	11:00	53	Sunny	
	11:00	-	12:00	59		
	9:00	-	10:00	55		
20/11/2021	10:00	-	11:00	56	Sunny	
	11:00	-	12:00	62		
	13:00	-	14:00	53		
26/11/2021	14:00	-	15:00	52	Sunny	
	15:00	-	16:00	58		
M	laximum			65		
N	Iinimum			42		
Average				55		
Action Level				297		
Li	mit Level			500		

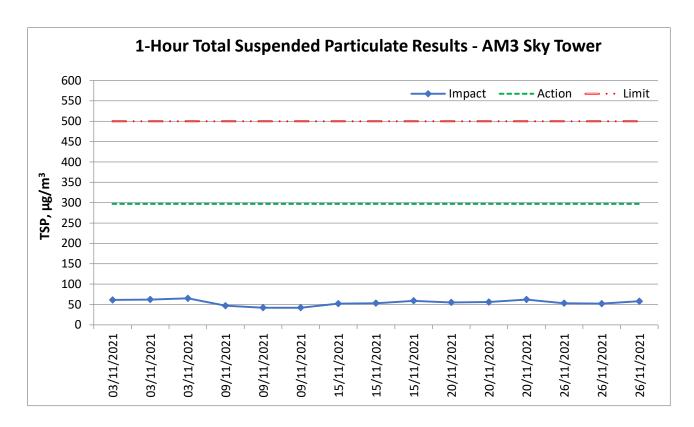
Location:
AM4(A) The Hong Kong
Society for the
Blind's Factory
cum Sheltered
Workshop

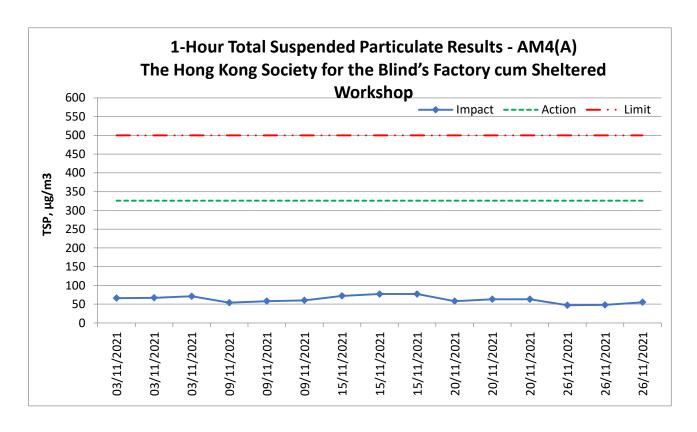
Date	Measure	emei	nt Period	1-hr TSP concentration, μg/m <sup>3</sup>	Weather		
	9:00	-	10:00	66			
03/11/2021	10:00	-	11:00	67	Sunny		
	11:00	-	12:00	71			
	13:00	-	14:00	54			
09/11/2021	14:00	-	15:00	58	Sunny		
	15:00	-	16:00	60			
	9:00	-	10:00	72			
15/11/2021	10:00	-	11:00	77	Sunny		
	11:00	-	12:00	77			
	9:00	-	10:00	58			
20/11/2021	10:00	-	11:00	63	Sunny		
	11:00	-	12:00	63			
	14:25	-	15:25	47			
26/11/2021	15:25	-	16:25	48	Sunny		
	16:25	-	17:25	55			
M	aximum			77			
N	Iinimum			47			
	Average			62			
Action Level			_	326			
Li	mit Level			500			

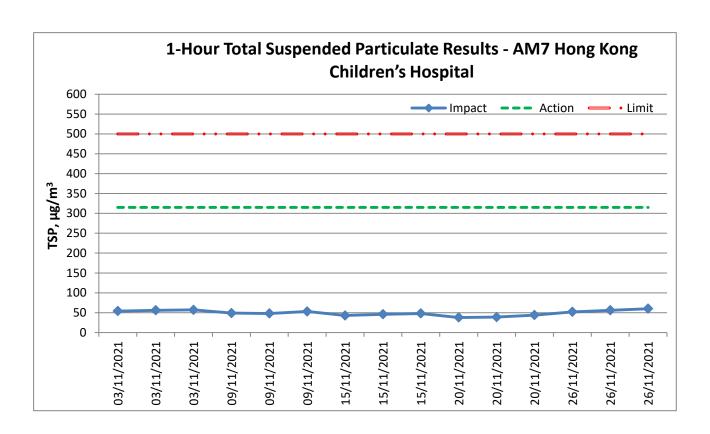
Location:
AM7 Hong Kong
Children's
Hospital

Date		sure erio	ment d	1-hr TSP concentration, μg/m <sup>3</sup>	Weather		
	13:00	-	14:00	54			
03/11/2021	14:00	-	15:00	56	Sunny		
	15:00	-	16:00	57			
	9:00	-	10:00	49			
09/11/2021	10:00	-	11:00	48	Sunny		
	11:00	-	12:00	53			
	13:00	-	14:00	43			
15/11/2021	14:00	-	15:00	46	Sunny		
	15:00	-	16:00	48			
	13:00	-	14:00	38			
20/11/2021	14:00	-	15:00	39	Sunny		
	15:00	-	16:00	44			
	9:15	-	10:15	52			
26/11/2021	10:15	-	11:15	56	Sunny		
	13:00	-	14:00	60			
M	aximum			60			
M	inimum			38			
A	Average			50			
Action Level				315			
Li	mit Level			500			

### 1-hour average TSP







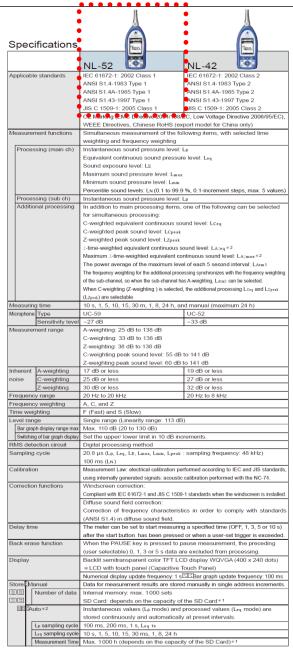
# Appendix I – Event and Action Plan for air quality

T		Ac	tion	
Event	ET	IEC	Supervisor / ER	Contractor
Action Level being exceeded by one sampling	<ol> <li>Identify source and investigate the causes of exceedance;</li> <li>Inform Contractor, IEC and Supervisor /ER;</li> <li>Repeat measurement to confirm finding.</li> </ol>	<ol> <li>Check monitoring data submitted by ET;</li> <li>Check Contractor's working method.</li> </ol>	1. Notify Contractor.	<ol> <li>Rectify any unacceptable practice;</li> <li>Amend working methods if appropriate.</li> </ol>
Action Level being exceeded by two or more consecutive sampling	<ol> <li>Identify source and investigate the causes of exceedance;</li> <li>Inform Contractor, IEC and Supervisor /ER;</li> </ol>	<ol> <li>Check monitoring data submitted by ET;</li> <li>Check Contractor's working method;</li> <li>Discuss with ET and</li> </ol>	Confirm receipt of notification of exceedance in writing;     Notify Contractor;     In consolidation with the	Discuss with ET and IEC on proper remedial actions;     Submit proposals for remedial actions to
	<ol> <li>Increase monitoring frequency to daily;</li> <li>Discuss with IEC and Contractor on remedial actions required;</li> </ol>	Contractor on possible remedial measures; 4. Advise the Supervisor /ER on the effectiveness of the proposed remedial	IEC, agree with the Contractor on the remedial measures to be implemented; 4. Supervise implementation	Supervisor /ER and IEC within three working day of notification; 3. Implement the agreed proposals;
	<ul> <li>5. Assess the effectiveness of Contractor's remedial actions;</li> <li>6. If exceedance continues, arrange meeting with IEC and Supervisor /ER;</li> <li>7. If exceedance stops, cease additional monitoring.</li> </ul>	measures.	of remedial measures; 5. Conduct meeting with ET and IEC if exceedance continues.	4. Amend proposal if appropriate.
Limit Level being exceeded by one sampling	Č	$\mathcal{E}$	<ol> <li>Confirm receipt of notification of exceedance in writing;</li> <li>Notify Contractor;</li> <li>In consolidation with the IEC, agree with the Contractor on the remedial</li> </ol>	Take immediate action to avoid further exceedance;     Discuss with ET and IEC on proper remedial actions;     Submit proposal for remedial actions to
	4. Assess effectiveness of	<u>'</u>	measures to be	Supervisor /ER and IEC

T. 4		Act	ion	
Event	ET	IEC	Supervisor / ER	Contractor
	Contractor's remedial actions and keep EPD, IEC and Supervisor /ER informed of the results.	on the effectiveness of the proposed remedial measures.	<ul> <li>implemented;</li> <li>Supervise implementation of remedial measures;</li> <li>Conduct meeting with ET and IEC if exceedance continues.</li> </ul>	within three working days of notification; 4. Implement the agreed proposals.
Limit Level being exceeded by two or more consecutive sampling	<ol> <li>Notify IEC, Supervisor /ER, Contractor and EPD;</li> <li>Repeat measurement to confirm findings;</li> <li>Carry out analysis of Contractor's working procedures to identify source and investigate the causes of exceedance;</li> <li>Increase monitoring frequency to daily;</li> <li>Arrange meeting with IEC, Supervisor /ER and Contractor to discuss the remedial action to be taken;</li> <li>Assess effectiveness of Contractor's remedial actions and keep EPD, IEC and Supervisor /ER informed of the results;</li> <li>If exceedance stop, cease</li> </ol>	<ol> <li>Check monitoring data submitted by ET;</li> <li>Check Contractor's working method;</li> <li>Discuss with Supervisor /ER, ET, and Contractor on the potential remedial actions;</li> <li>Review Contractor's remedial actions whenever necessary to assure their effectiveness and advise the Supervisor /ER accordingly.</li> </ol>	<ol> <li>Confirm receipt of notification of exceedance in writing;</li> <li>Notify Contractor;</li> <li>In consolidation with the IEC, agree with the Contractor on the remedial measures to be implemented;</li> <li>Supervise implementation of remedial measures;</li> <li>If exceedance continues, consider stopping the Contractor to continue working on that portion of work which causes the exceedance until the exceedance is abated.</li> </ol>	<ol> <li>Take immediate action to avoid further exceedance;</li> <li>Discuss with ET and IEC on proper remedial actions;</li> <li>Submit proposal for remedial actions to Supervisor /ER and IEC within three working days of notification;</li> <li>Implement the agreed proposals;</li> <li>Submit further remedial actions if problem still not under control;</li> <li>Stop the relevant portion of works as instructed by the Supervisor /ER until the exceedance is abated.</li> </ol>

 $\label{eq:continuous} \begin{tabular}{ll} Appendix J-Calibration certificates, catalogue of noise monitoring \\ equipment \end{tabular}$ 

#### Catalogue of Sound Level Meter



Data r	ecall	Allows viewing of stored data
Setup	memory	Up to five setup configurations can be saved in internal memory, for later recal
		Start up via file settings previously stored on SD card possible
Wavefo	orm recording *3	
File	format	Uncompressed waveform WAVE file
San	npling frequency	Select 48 kHz, 24 kHz or 12 kHz
Dat	ta length	Select 24 bit or 16 bit
Outputs	DC output	Output DC signals using a frequency weighting characteristic selected by processing
	Output voltage	2.5 V, 25 mV / dB at bar graph display full scale
	AC output	Output AC signals using a frequency weighting characteristic selected by
		processing or by A, C, Z-weighting.
	Output voltage	1 ∨ (rms values) at bar graph display full scale
	Comparator	Turns on when the open-collector output exceeds the set value
	output*2	(max. applied voltage 24 V, max. current 60 mA, allowable dissipation 300 mW)
USB	18	Allows USB to be connected to a computer and recognized as a removable dis
22 20 20	1	Allows USB to be controlled via communication commands
RS-23	2C communication	Allows for RS-232C communication via use of a dedicated cable
Data c	ontinuous output*2	
Тур	e of Instantaneous value	Lp
dat	a Processed value	Leq, Lmax, Lmin, Lpeak
Out	tput interval	100 ms
Print o	out	Printing of measurement results on dedicated printer DPU-414
Power	requirements	Four IEC R6 (size AA) batteries (alkaline or rechargeable batteries) or external power supply
Bat	tery life (23 °C)	Alkaline battery LR6 (AA): 26 h Ni-MH secondary battery: 25 h
		At the maximum *Depends on the setting
AC	adapter	NC-98C (NC-34 for previous models cannot be used)
Ext	emal power voltage	5 to 7 V (rated voltage: 6 V)
Cui	rrent consumption	Approximately 90 mA (normal operation, rated voltage)
Ambie	nt Temperature	−10 to +50 °C
conditi	ons Humidity	10 to 90 % RH (non-condensing)
Dustpr	oof / water-resistant	IP code: IP54 (except for microphone)
perforr	mance *4	See precautions regarding waterproofing
Dimen	sions, weight	Approx. 250 (H) x 76 (W) x 33 mm(D), approx. 400 g (with batteries)
Suppli	ed accessories	Storage case x 1, Windscreen WS-10 x 1, Windscreen fall prevention rubber x 1,
		Hand strap x 1, LR6 (AA) alkaline batteries x 4, SD card 512 MB×1 (NX-42EX
		preinstalled model only)

Product name	Product number
Extended function program (Inst.on 512 MB SD card)	NX-42EX
Waveform recording program*2 (Inst.on 2 GB SD card)	NX-42WR
Octave, 1/3 octave real-time analysis program*2 (Inst.on 512 MB SD card)	NX-42RT
FFT analysis program *2 (Inst.on 512 MB SD card)	NX-42FT
Data management software for environmental measurement	AS-60
Data management software for environmental measurement (Includes the octave and 1/3 octave data management software)	AS-60RT
Data management software for environmental measurement (Includes the vibration level data management software)	AS-60VM
Waveform analysis software	CAT-WAVE
SD Card 512 MB	SD-512M
SD Card 2 GB	SD-2G
AC adapter (100 ∨ to 240 ∨)	NC-98C
Battery pack	BP-21
Microphone extension cables	EC-04 (from 2 m)
BNC-Pin output code	CC-24
Comparator output cable	CC-42C
Printer	DPU-414
Printer cable	CC-42P
RS 232C serial I/O cable	CC-42R
USB cable	_
Sound calibrator	NC-74
All-weather windscreen	WS-15
Windscreen mounting adapter	WS-15006
Rain-protection windscreen	WS-16
Sound level meter tripod	ST-80
All-weather windscreen tripod	ST-81

\*4 Protection against harmful dust and water splashing from any direction.

Before use, verify that the rubber bottom cover and the battery compartment lid are firmly closed. To maintain the water and dust proof rating, internal packing replacement is required every two years (at



RION CO., LTD.

3-20-41, Higashimotomachi, Kokubunji, Tokyo 185-8533, Japan Tel: +81-42-359-7888 Fax: +81-42-359-7442

This product is environment-friendly. It does not include toxic chemicals on our policy.

This product is certified to an International Protection rating of IP54 (dust protected and resistant to splashing water).
This leaffet is printed with environmentally friendly vegetable-based ink on recycled paper.

1011-4 E 212.P.D

AAST-SLM-10 Cal Cost: 2021/7/19



中国赛宝实验室计量检测中心 (工业和信息化部电子第五研究所计量检测中心) CHINA CEPREL LABORATORY CALIBRATION & TESTING CENTRE

# CALIBRATION CERTIFICATE

证书编号: 2HB21001383-0001 Certificate No.



委托单位: _ Client	Castco Testing Centre Limited				
仪器名称: Description		Sound Level Meter			
型号规格: Model/Type		NL-52			
制造商: Manufacturer	-	RION			
机身号: Serial No.	00976203				
管理号: Asset No.		AAST-SLM-10			
接收日期:	2021-07-08	校准日期:	2021-07-19		
Rec. Date 答发日期:	2021-07-19	Cal. Date 建议校准周期:	12个月(12 months)		
App. Date	所校准项	Reference Cal. Peri 目合格(Passed at Calibra			

Approved by

Conclusion

賽宝计量检测中心 广州总部地址:广州市增城区朱村街朱村大道西78号 客服电话: 020-87237633 传真: 020-87236189 投诉电话: 020-87236896 邮件: cal@ceprei.com 周址: www.ceprei-cal.com

印章:

Stamp

CEPREI Calibration and Testing Centre HO Addr: No.78 Zhucun Avenue West Zenechene District Guanezhou, China Service Tel: 020-87237633 Fax: 020-87236189 Complaint Tel: 020-87236896 Email: cal@ceprei.com Website: www.ceprei-cal.com

第1页共8页 Page of

31.5Hz~16kHz

# DIRECTIONS

1. 本机构质量管理体系符合ISO/IEC 17025:2017标准的要求,获得中国合格评定国家认可委员会( CNAS) 认可, 认可证书号为: CNAS L13344。

This laboratory quality management system meets the ISO/IEC 17025:2017 and is accredited by the China National Accreditation Service for Conformity Assessment, No. CNAS L13344.

2. 本次校准的技术依据及CNAS认可范围(Reference documents and CNAS accredited scopes):

■ JJG 188-2017 声级计检定规程: Sound pressure level: (20~130)dB: Frequency Weighting: (20~130)dB@(10 Hz~20kHz).

TILE - CANALE/S · 详细内容请查看CNAS网络中注册编号为113344的证书别件,超出范围的内容未被认可,其结果/结论所依据的合格评定活动不在认可范围内,(Please see the attachment of certificate No. L13344 at (CNAS website for details, beyond which is not accredited, the conformity assessment activities on which the results/conclusions are based are outside the expery of accreditation.).

3 木次检准所使用的主要测量标准(The main measurement standards used during the calibration):

名称	证书号/有效期/溯源单位	技术指标	测量范围
(Description)	(Certificate No./Due Date/Traceability to)	(Specification)	(Measuring Range)
正弦信号发生器	4GC20000427-0010/2021-11-04/赛宝(广州)	f: ±1mHz: 失真度 Distortion: <-70dB	f: 0.001Hz~200kHz: <i>U</i> : 100µV~5Vrms
数字多用表	4GC20000358-0060/2021-09-09/賽宝(广州)	DCV: ±0.0035%; ACV: ± 0.06%; DCI: ±0.05%; ACI : ±0.1%; R: ±0.01%; f: ±0.001%	DCV:(0~1000)V; ACV (0.001~750)V@(3Hz~ 300kHz); DCI:(0~3)A ; ACI:(0~3)A@(3Hz~ 5kHz); R:(0~100)MΩ ; f:3Hz~300kHz
步进衰减器	4GC21000155-0024/2022-04-29/赛宝(广州)	±3dB	(0~110) dB/10dB step @(DC~1GHz)
PULSE分析系统	GFJGJL1001210202725/2022-03-03/航空 304所	频率:U <sub>rel</sub> =0.001%,k=2;电压: U <sub>rel</sub> =0.04%,k=2	頻率:0.001Hz~51.2kHz, 电压:(1×10 <sup>5</sup> ~30)V
标准传声器	LSsx2021-13180/2022-04-24/中国计量院	U=(0.05~0.20)dB (k=2)	20Hz~20kHz
前置放大器	LSsx2021-11346/2022-03-07/中国计量院	U=0.3dB (k=2)	(10~20000) Hz
功率放大器	4GC20000457-0065/2021-11-17/赛宝(广州)	频率响应: ±ldB, 失真度	20Hz~20kHz

4. 校准地点(The calibration place): 广州市增城区朱村街朱村大道西78号9栋110室

环境条件(Environmental conditions): 温度(Temperature): 23.4°C 相对湿度(Relative Humidity): 55.8%

多功能声学校准器 4EC20000091-0005/2021-11-05/赛宝(广州) 1级

6. 本证书中给出的扩展不确定度依据JJF1059.1-2012《测量不确定度的评定与表示》评定,由合成标 准不确定度乘以包含概率约为95%时对应的包含因子k得到。

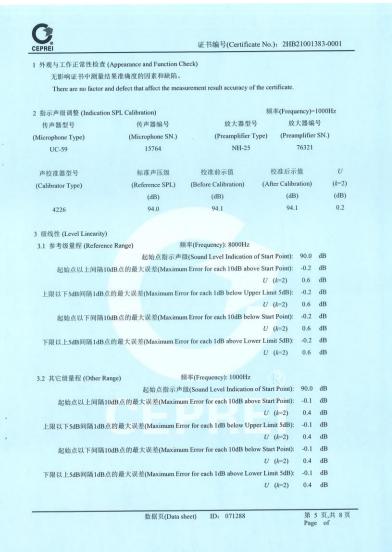
The extended uncertainty given in this certificate is evaluated according to JJF1059.1-2012 "Evaluation and Expression of Uncertainty in Measurement", and is calculated by multiplying the combined standard uncertainty by the coverage factor k which corresponding to the coverage probability about 95%.

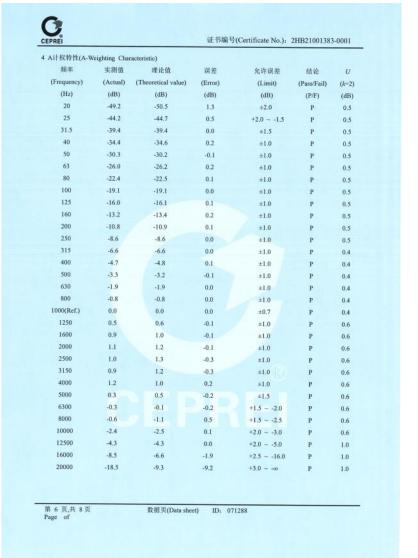
7. 证书中"P"、"合格"代表"测量结果在允许范围内", "F"、"不合格"代表"测量结果不在允许范围内", "N/A"代表"不适用或技术指标暂时无法确认等"。本证书报告的结论仅供参考,使用人员应结合实际测量的要求合理使用,如考虑测量结果测量不确定度的影响等。

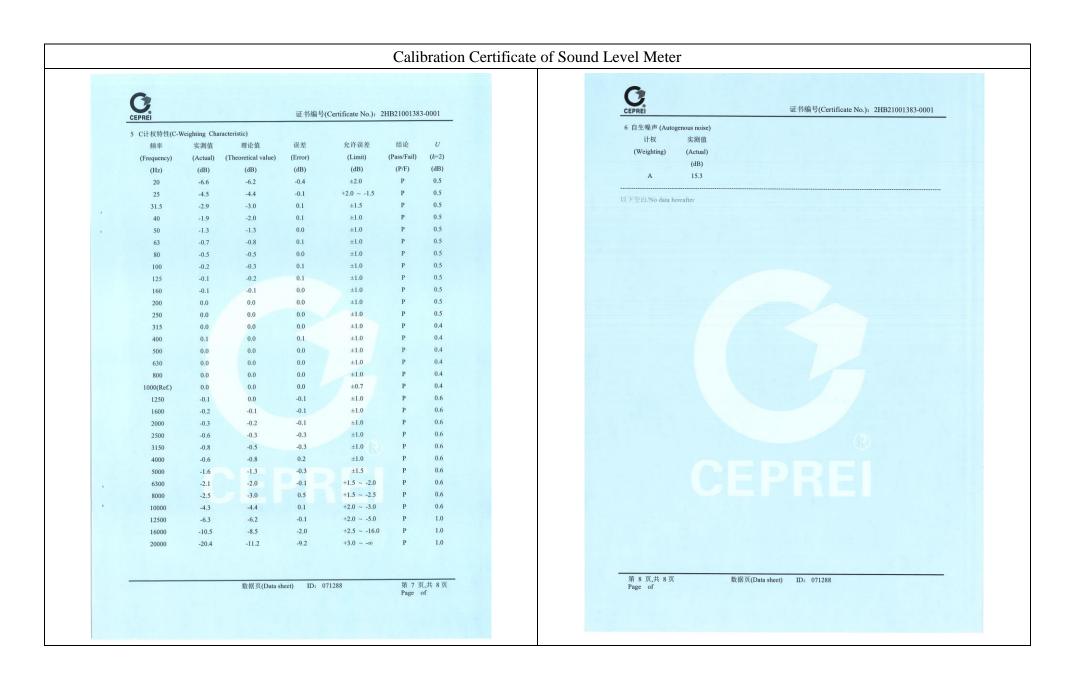
"P" and "Pass" in this certificate stand for "Low Limit's the measured value SHigh Limit", "F" and "Fail" stand for "the measured value Low Limit or the measured value High Limit", "N/A" stands for "Not Applicable or The technical specification has not been confirmed etc". The conclusions of this certificate are for reference only. Users should use them reasonably according to the actual measurement requirements, such as considering the impact of measurement

8. 建议校准周期是本实验室依据本证书报告的技术依据和仪器设备常规使用条件给出的建议,供委 托方参考。委托方可以根据实际使用情况自行决定样品的校准周期。

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中国赛宝实验室计量检测中心 (工业和信息化部电子第五研究所计量检测中心) CHINA CEPREI LABORATORY CALIBRATION & TESTING CENTRE

# CALIBRATION CERTIFICATE

证书编号: 2HB21001370-0002 Certificate No.



委托单位:	Castco Testing Centre Limited				
仪器名称:	Sound Level Meter				
Description 型号规格: Model/Type	NL-52				
制造商:	RION				
机身号:	00976204				

管理号: Asset No.

接收日期: Rec. Date 签发日期:

Serial No.

App. Date 结论: Conclusion 2021-07-08 2021-07-19

校准日期: Cal. Date

AAST-SLM-11

建议校准周期:

12个月(12 months)

2021-07-19

Reference Cal. Period

所校准项目合格(Passed at Calibration Items)



Approved by



寨宝计量检测中心 广州总部地址:广州市增城区朱村街朱村大道西78号 客服电话: 020-87237633 传真: 020-87236189 投诉电话: 020-87236896 邮件: cal@ceprei.com

网址: www.ceprei-cal.com

Stamp CEPREI Calibration and Testing Centre

印章:

HQ Addr: No.78,Zhucun Avenue West,Zengcheng District,Guangzhou,China Service Tel: 020-87237633 Fax: 020-87236189 Complaint Tel: 020-87236896

Email: cal@ceprei.com Website: www.ceprei-cal.com

第1页,共8页 Page of

# DIRECTIONS

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■ JJG 188-2017 声级计检定规程: Sound pressure level: (20~130)dB: Frequency Weighting: (20~130)dB@(10

AND 4-29

- 第個內容清查看CNAS阿站中注册编号为L13344的证书附件,超出范围的内容未被认可,其结果结论所依据的合格评定活动不在认可范围内。(Please see the attachment of certificate No. L13344 at CNAS website for details, beyond which is not accredited, the conformity assessment activities on which the results/conclusions are based are outside the scope of accreditation.).

3. 本次校准所使用的主要测量标准(The main measurement standards used during the calibration):

3.	名称	证书号/有效期/溯源单位	技术指标	测量范围
	(Description)	(Certificate No./Due Date/Traceability to)	(Specification)	(Measuring Range)
	正弦信号发生器	4GC20000427-0010/2021-11-04/賽宝(广州)	Distortion: <-70dB	f: 0.001Hz~200kHz: <i>U</i> : 100μV~5Vrms
	数字多用表	4GC20000358-0060/2021-09-09/賽宝(广州)	DCV: ±0.0035%; ACV: ± 0.06%; DCI: ±0.05%; ACI : ±0.1%; R: ±0.01%; f: ±0.001%	
	步进衰减器	4GC21000155-0024/2022-04-29/赛宝(广州)	±3dB	(0~110) dB/10dB step @(DC~1GHz)
	PULSE分析系统	GFJGJL1001210202725/2022-03-03/航空 304所	频率: U <sub>rel</sub> =0.001%,k=2;电压: U <sub>rel</sub> =0.04%,k=2	频率:0.001Hz~51.2kHz, 电压:(1×10 <sup>-5</sup> ~30)V
	标准传声器	LSsx2021-13180/2022-04-24/中国计量院	U=(0.05~0.20)dB (k=2)	20Hz~20kHz
	前置放大器	LSsx2021-11346/2022-03-07/中国计量院	U=0.3dB (k=2)	(10~20000) Hz
	功率放大器	4GC20000457-0065/2021-11-17/赛宝(广州)	频率响应: ±1dB, 失真度: ≤0.2%	20Hz~20kHz
	多功能声学校准器	4EC20000091-0005/2021-11-05/賽宝(广州)	1级	31.5Hz~16kHz

4. 校准地点(The calibration place):

广州市增城区朱村街朱村大道西78号9栋110室 5. 环境条件(Environmental conditions):

温度(Temperature): 23.4℃ 相对湿度(Relative Humidity): 55.8% 6. 本证书中给出的扩展不确定度依据JJF1059.1-2012《测量不确定度的评定与表示》评定,由合成标

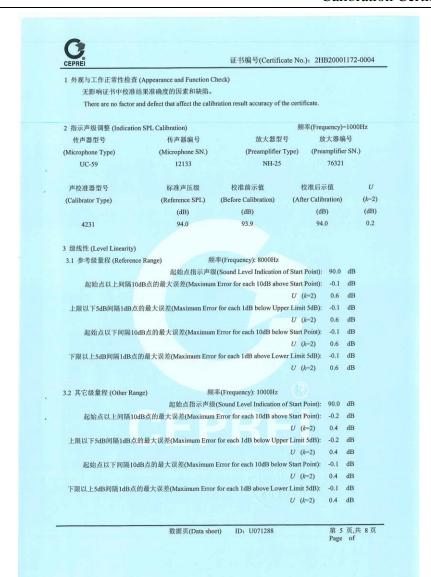
准不确定度乘以包含概率约为95%时对应的包含因子k得到。 The extended uncertainty given in this certificate is evaluated according to JJF1059.1-2012 "Evaluation and Expression of Uncertainty in Measurement", and is calculated by multiplying the combined standard uncertainty by the coverage factor k which corresponding to the coverage probability about 95%.

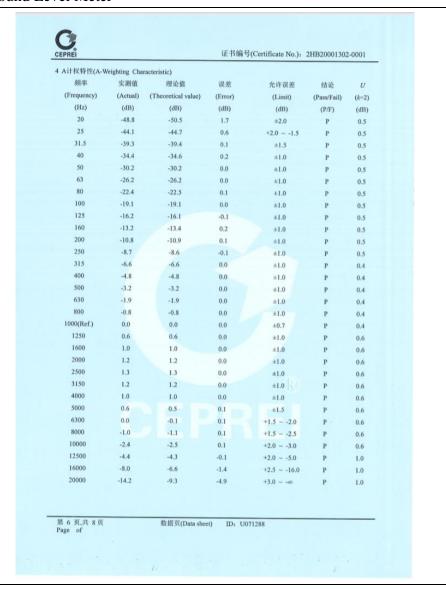
7. 证书中"P"、"合格"代表"测量结果在允许范围内", "F"、"不合格"代表"测量结果不在允许范围内", "N/A"代表"不适用或技术指标暂时无法确认等"。本证书报告的结论仅供参考,使用人员应 结合实际测量的要求合理使用,如考虑测量结果测量不确定度的影响等。

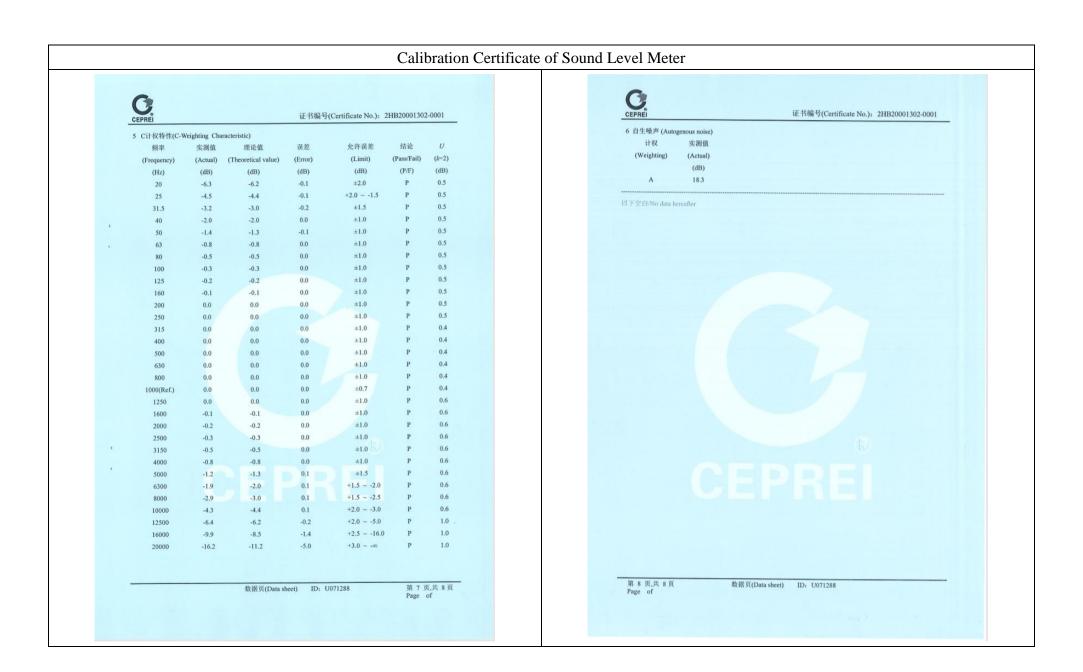
"P" and "Pass" in this certificate stand for "Low Limit≤the measured value ≤High Limit", "F" and "Fail" stand for "the measured value < Low Limit or the measured value > High Limit", "N/A" stands for "Not Applicable or The technical specification has not been confirmed etc". The conclusions of this certificate are for reference only. Users should use them reasonably according to the actual measurement requirements, such as considering the impact of measurement

8. 建议校准周期是本实验室依据本证书报告的技术依据和仪器设备常规使用条件给出的建议,供委 托方参考。委托方可以根据实际使用情况自行决定样品的校准周期。

> 第 3 页,共 8 页 Page of







#### Catalogue of Sound Calibrator

Sound Calibrator NC-75





Compact and lightweight sound calibrator allows highly reliable and accurate measurement anywhere

# Sound Calibrator



- Integrated newly developed reference microphone enables feedback control that completely eliminates the need for atmospheric pressure and coupler volume correction, resulting in highly accurate and reliable calibration.
- Effective coupler sound insulation (30 dB or higher\*) permits calibration also in relatively noisy environments. \*A-weighed sound level insulation performance measured with pink noise
- Each product comes standard with a JCSS Calibration Certificate, demonstrating high quality.
- Ocnforming with IEC 60942: 2017 class 1 and
- (Also complies with IEC 60942 Version 4 currently under revision) Supports calibration of RION sound level meters compliant with IEC 61672-1: 2013, JIS C 1509-1: 2017 and JIS C 1516: 2014.
- Supports calibration of RION microphones and microphones of
- other manufacturers meeting the size specifications of IEC 61094-4.

  Supports 1-inch, 1/2-inch, and 1/4-inch microphones (1/4 inch with optional adapter)



#### Catalogue of Sound Calibrator



How to use the adapter

#### ■ 1-inch microphones

To use the sound calibrator with 1-inch diameter microphones, remove the 1/2-inch microphone adapter



#### ■ 1/2-inch microphones

To use the sound calibrator with 1/2-inch diameter microphones, the supplied 1/2-inch microphone adapter must be in place.



 1/4-inch microphones To use the sound calibrator with 1/4-inch diameter microphones use the supplied 1/2-inch microphone adapter together with the optional



1/4-inch adapter.

ecifications (under	standard ambient conditions*)	Strap
plicable standards	IEC 60942: 2017 class1, ANSI/ASA S1.40-2006 class1, JIS C 1515: 2004 class 1, CE marking, WEEE directive, Chinese RoHS	
pported prophones	Microphones made by RION and microphones made by other manufacturers that meet the IEC 61094-4 size specifications 1-inch microphones (with supplied adapter) 1/2-inch microphones (with optional adapter)	
ninal sound pressure level	94 dB	1
nd pressure level tolerance	Max. ±0.20 dB	
minal frequency	1 000 Hz	
quency tolerance	Max. ±0.1%	Securely car
D + noise	Max. 1.0 % (22.4 Hz to 22.4 kHz)	the supplied
nensions and weight	Approx. 42 mm (H) x 77 mm (W) x 70 mm (D), approx. 200 g	
wer supply	IEC LR6 (size AA) alkaline battery x 2 IEC LR6 (size AA) nickel-hydride rechargeable battery ("eneloop pro" supported) x 2	
tery life	50 hours or more (using two alkaline batteries, continuous use)	
	50 hours or more (using two nickel-hydride rechargeable batteries [eneloop pro], continuous use)	PISTO
nation assessment	Coft sees v. 1. 1/0 inch missenhous adentes v. 1. IEC I DR	NC-72





IEC 60942: 2017 class LS/M, class 1/M, JIS C 1515: 2004 class LS/C, class 1/C





(size AA) alkaline battery x 2, hand strap x 1, JCSS Calibration Certificate x 1



3-20-41, Higashimotomachi, Kokubunji, Tokyo 185-8533, Japan Tel: +81-42-359-7888 Fax: +81-42-359-7442

### Catalogue of Sound Calibrator

For microphone calibration NC-74

#### How to use

Carefully insert the microphone all the way into the coupler of the NC-74. Then simply turn the power on to apply a constant sound pressure level to the diaphragm of the microphone.



The performance of the NC-74 is suitable for calibration of high-precision sound level meters. The unit is compact, lightweight, and easy to use. Two IEC LR6 (size AA) alkaline batteries will power the unit for more than 30 hours of continuous use at room temperature.

The NC-74 incorporates a sensor that detects atmospheric pressure. Based on the information provided by the sensor, the CPU controls the signal amplitude. This allows the unit to always provide the correct output for achieving constant sound pressure level, regardless of fluctuations in atmospheric pressure.



#### Using the 1/2-inch adapter

To allow calibration of sound level meter microphones with inch diameter, the 1/2-inch microphone adapter can be removed. 1/2-inch microphones are calibrated with the adapter in place.



#### Specifications

Applicable standards	JIS C1515:2004 Class		
Suitable microphones	1-inch microphones	IEC 61094-1 Type LS1P UC-27 UC-25 UC-34	
	1/2-inch microphones	IEC 61094-1 Type LS2aP UC-59 UC-57 UC-53A UC-52 UC-26 UC-26 UC-30 UC-31 UC-33P	
Nominal sound pressure level	94 dB		
Sound pressure level tolerance	±0.3 dB		
Nominal frequency	1 kHz		
Frequency tolerance	±1.0 % or less		
Power requirements	IEC LR6 (size AA) alkal	ine battery X 2	
Dimensions, mass	Approx. 49 (H) × 80 (W) × 74 (D) mm Approx. 200 g (including batteries)		
Supplied accessories	Case X 1 IEC LR6 (size AA) alkaline battery X 2 1/2-inch microphone adapter NC-74-002 X 1		

\* Specification subject to change without notice.



3-20-41,Higashimotomachi,Kokubunji,Tokyo 185-8533,Japan Tel: +81-42-359-7888 Fax: +81-42-359-7442 http://www.rion.co.jp/english/



#### Calibration Certificate of Sound Calibrator



中国赛宝实验室计量检测中心 (工业和信息化部电子第五研究所计量检测中心) CHINA CEPREI LABORATORY CALIBRATION & TESTING CENTRE

## 校准证书 CALIBRATION CERTIFICATE

证书编号: 2HB21001749-0002 Certificate No.





終托单位: _ lient	Castco Testing Centre Limited					
以器名称: _ Description	Sound Level Calibrator					
U号规格:  odel/Type		NC-75				
引造商: Ianufacturer		RION				
L身号: _ erial No.	1,247	34280310				
理号: sset No.		AAST-SLC-07				
後收日期: ec. Date	2021-08-05	校准日期: Cal. Date	2021-08-17			
发日期: _ pp. Date	2021-08-18	建议校准周期: Reference Cal. Perio	12个月(12 months) od			
论: onclusion	所校准项	目合格(Passed at Calibra	tion Items)			

GEPRE

校准: Calibrated b

Approved by

赵文红

為中木も

Inspected by

Stamp

賽宝计量檢測中心 广州总部地址: 广州市增城区朱村街朱村大道两78号 客服电话: 020-87237633 传真: 020-87236189 投诉电话: 020-87236896

邮件: cal@ceprei.com 同址: www.ceprei-cal.com CEPREI Calibration and Testing Centre

CEPREI Calibration and Testing Centre
HQ Addr. No.78\_Ducum Avenue West.Zengcheng District,Guangzhou,China
Service Tel: 020-87237633 Fax: 020-87236189
Complaint Tel: 020-87237693
Email: cali@ceprei.com

第 1 页,共 5 页 Page of

#### Calibration Certificate of Sound Calibrator

TE 1848 E (Costi Scotte No. 3 - 21/R21001749-0002

### 说 明 DIRECTIONS

1. 本机构质量管理体系符合ISO/IEC 17025:2017标准的要求,获得中国合格评定国家认可委员会(CNAS)认可,认可证书号为: CNAS L13344。

This laboratory quality management system meets the ISO/IEC 17025:2017 and is accredited by the China National Accreditation Service for Conformity Assessment, No. CNAS L13344.

- 2. 本次校准的技术依据及CNAS认可范围(Reference documents and CNAS accredited scopes):

  "JIG 176-2005 声校准器检定规程: Sound Pressure Level: 94dB. 104dB. 114dB. 124dB(63Hz~8kHz): 94dB. 104dB. 114dB. 13.Hz~16kHz): Frequency: 31.5Hz~16kHz: Harmonic Distortion: 0~10%. (20Hz~20
- KHZ)。 详细内容请查看CNAS网络中连师编号为L13344的证书册件,超出范围的内容未被认可,其结果/结论所依据的合格评定活动不在认可 范围号,(Please see the attachment of certificate No. L13344 at (CNAS website for details, beyond which is not accredited, the conformity assessment activities on which the results conclusions are based are outside the scope of accreditation.)
- 3. 本次校准所使用的主要测量标准(The main measurement standards used during the calibration):
  名称
  证书号/有效期/测源单位
  技术指标
  测量范围

(Description)	(Certificate No./Due Date/Traceability to	(Specification)	(Measuring Range)
标准传声器	LSsx2021-13180/2022-04-24/中国计量院		10Hz~20kHz
PULSE分析系统	4GC21000026-0375/2022-01-21/赛宝(广州)	頻率:Urei=0.001%,k=2;电压: Urei=0.04%,k=2	频率:0.001Hz~51.2kHz, 电压:(1×10 <sup>-5</sup> ~30)V
前置放大器	LSsx2021-13000/2022-04-19/中国计量院	U=0.3dB (k=2)	(10~50000) Hz

4. 校准地点(The calibration place):

广州市增城区朱村街朱村大道西78号9栋110室

- 5. 环境条件(Environmental conditions):
- 温度(Temperature): 22.9°C 相对湿度(Relative Humidity): 59.5%
- 6. 本证书中给出的扩展不确定度依据JJF1059.1-2012《测量不确定度的评定与表示》评定,由合成标准不确定度乘以包含概率约为95%时对应的包含因子k得到。

The extended uncertainty given in this certificate is evaluated according to JJF1059.1-2012 "Evaluation and Expression of Uncertainty in Measurement", and is calculated by multiplying the combined standard uncertainty by the coverage factor & which corresponding to the coverage probability about 95%.

7. 证书中"P"、"合格"代表"测量结果在允许范围内", "F"、"不合格"代表"测量结果不在允许范围内", "N/A"代表"不适用或技术指标暂时无法确认等"。本证书报告的结论仅供参考,使用人员应结合实际测量的要求合理使用,如考虑测量结果测量不确定度的影响等。

"P" and "Pass" in this certificate stand for "Low Limit≤the measured value ≤High Limit", "F" and "Fail" stand for "the measured value <Low Limit or the measured value > High Limit", "NA stands for "Not Applicable or The technical specification has not been confirmed ete."The conclusions of this certificate are for reference only. Users should use them reasonably according to the actual measurement requirements, such as considering the impact of measurement

8. 建议校准周期是本实验室依据本证书报告的技术依据和仪器设备常规使用条件给出的建议,供委托方参考。委托方可以根据实际使用情况自行决定样品的校准周期。

The reference calibration period is based on the reference documents and normal operating conditions of the calibrated instrument. It is only for reference. The client may decide the calibration period of the instrument according to the

- 注: 1.本证书未经本机构书面授权,不得部分复制。(The certificate shall not be partly reproduced without written approval of the laboratory.)
- 2.本次校准结果仅与被校物有关。(The results are only related to the items calibrated.)

第 3 页,共 5 页 Page of

证书编号(Certificate No.): 2HB21001749-0002 1 外观与工作正常性检查 (Appearance and Function Check) 无影响证书中校准结果准确度的因素和缺陷。 There are no factor and defect that affect the calibration result accuracy of the certificate. 2 声压级 (Sound Pressure Level) 允许范围 结论 规定声压级 测量声压级 声压级差的绝对值 (Pass/Fail) (k=2)(Prescribed SPL) (Measured SPL) (Absolute value of SPL) (Limit) (dB) (dB) (dB) (dB) (dB) 0.10 94.12 0.12 ≤0.40 94 3 頻率 (Frequency)  $U_{\rm rel}$ 结论 规定频率 测量频率 频率误差的绝对值 允许范围 (Pass/Fail) (k=2)(Prescribed Fre.) (Measured Fre.) (Absolute value of Fre.) (Limit) (%) (%) (%) (Hz) (Hz) 0.10 ≤1.00 1000.0 0.00 1000 4 总失真 (Distortion) 结论 Urel 规定声压级 规定频率 总失真 允许范围 (k=2)(Pass/Fail) (Prescribed SPL) (Measured Fre.) (Distortion) (Limit) (%) (%) (Hz) (%) 5.0 ≤3.00 1000 0.15 数据页(Data sheet) ID: 013393 第5页,共5页 Page of

#### Calibration Certificate of Sound Calibrator

AAST-SLC-05 Cal Cert: 2021/07/19 中国赛宝实验室计量检测中心 (工业和信息化部电子第五研究所计量检测中心) CHINA CEPREI LABORATORY CALIBRATION & TESTING CENTRE CALIBRATION CERTIFICATE 证书编号: 2HB21001370-0004 Certificate No. Castco Testing Centre Limited 委托单位: Sound Level Calibrator 仪器名称: Description NC-74 型号规格: Model/Type RION 制造商: Manufacturer 34178129 机身号: Serial No. AAST-SLC-05 管理号: Asset No. 2021-07-08 2021-07-19 接收日期: 校准日期: Cal. Date Rec Date 12个月(12 months) 建议校准周期: 签发日期: Reference Cal. Period App. Date 所校准项目合格(Passed at Calibration Items) 结论: Conclusion 签发: 印章: Approved by Stamp 赛宝计量检测中心 CEPREI Calibration and Testing Centre 广州总部地址:广州市增城区朱村街朱村大道西78号 HQ Addr: No.78, Zhucun Avenue West, Zengcheng District, Guangzhou, China Service Tel: 020-87237633 Fax: 020-87236189 客服电话: 020-87237633 传真: 020-87236189 投诉电话: 020-87236896 Complaint Tel: 020-87236896

Email: cal@ceprei.con

Website: www.ceprei-cal.com

邮件: cal@ceprei.com

例址: www.ceprei-cal.com

iii 1888 85 (Corrificate No.) - 2HB21001370-0004

#### 说 明 DIRECTIONS

 本机构质量管理体系符合ISO/IEC 17025:2017标准的要求,获得中国合格评定国家认可委员会( CNAS)认可,认可证书号为; CNAS L13344。

This laboratory quality management system meets the ISO/IEC 17025:2017 and is accredited by the China National Accreditation Service for Conformity Assessment, No. CNAS L13344.

- 本次校准的技术依据及CNAS认可范围(Reference documents and CNAS accredited scopes):
   JJG 176-2005 声枝准器检定规程: Sound Pressure Level: 94dB、104dB、114dB、124dB(63Hz~8kHz): 94dB、104dB、114dB、31.5Hz~16kHz): Frequency: 31.5Hz~16kHz; Harmonic Distortion: 0~10%, (20Hz~20
- \* 详由作容清查看CNAS网站中注册编号为L13344的证书附件,超出范围的内容未被认可,其结果结论所依据的合格评定活动不在认可 范围内。(Please see the attachment of certificate No. L13344 at CNAS website for details, beyond which is not accredited, the conformity assessment activities on which the results/conclusions are based are outside the scope of accreditation.)-
- 3. 本次校准所使用的主要测量标准(The main measurement standards used during the calibration);

   名
   事
   证书与/有效期/测源单位
   技术指标
   (Magazing Range)

   PULS启分析系统
   4GC21000026-0375/2022-01-21/率宝(厂州)
   频率±U<sub>n</sub>=0.001%<sub>n</sub>-2-1 些 版单、0018x-51.2kHz。
   频率0.01Hx-51.2kHz。

   标准作声器
   LSsx2021-131802/022-04-19/中国计量版
   U=0.05-0.2018 (A=2)
   201x2-20kHz

   前置放大器
   LSsx2021-13000/2022-04-19/中国计量版
   U=0.05-0.2018 (A=2)
   1(10-50000)
- 4. 校准地点(The calibration place):

广州市增城区朱村街朱村大道西78号9栋110室

5. 环境条件(Environmental conditions):

温度(Temperature): 23.3°C 相对湿度(Relative Humidity): 59.6%

6. 本证书中给出的扩展不确定度依据JJF1059.1-2012《测量不确定度的评定与表示》评定,由合成标准不确定度乘以包含概率约为95%时对应的包含因子k得到。

The extended uncertainty given in this certificate is evaluated according to JJF1059.1-2012 "Evaluation and Expression of Uncertainty in Measurement", and is calculated by multiplying the combined standard uncertainty by the coverage factor & which corresponding to the coverage probability about 95%.

7. 证书中"P"、"合格"代表"测量结果在允许范围内","F"、"不合格"代表"测量结果不在允许范围内","N/A"代表"不适用或技术指标暂时无法确认等"。本证书报告的结论仅供参考,使用人员应结合实际测量的要求合理使用,如考虑测量结果测量不确定度的影响等。

"P" and "Pass" in this certificate stand for "Low Limit's the measured value \ High Limit", "F" and "Fail" stand for "the measured value \ Low Limit or the measured value \ High Limit", "N/A" stands for "Not Applicable or The technical specification has not been confirmed ete". The conclusions of this certificate are for reference only. Users should use them reasonably according to the actual measurement requirements, such as considering the impact of measurement uncertainty, etc.

8. 建议校准周期是本实验室依据本证书报告的技术依据和仪器设备常规使用条件给出的建议,供委托方参考。委托方可以根据实际使用情况自行决定样品的校准周期。

The reference calibration period is based on the reference documents and normal operating conditions of the calibrated instrument. It is only for reference. The client may decide the calibration period of the instrument according to the actual use.

- 注: 1.本证书未经本机构书面授权,不得部分复制。(The certificate shall not be partly reproduced without written approval of the laboratory.)
- 2.本次校准结果仅与被校物有关。(The results are only related to the items calibrated.)

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第1页共5页

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#### Calibration Certificate of Sound Calibrator **SPECIFICATIONS** 证书编号(Certificate No.): 2HB21001370-0004 1 外观与工作正常性检查 (Appearance and Function Check) 无影响证书中校准结果准确度的因素和缺陷。 There are no factor and defect that affect the calibration result accuracy of the certificate. Velocity Range (TA410) Range (TA430, TA440) 2 声压级 (Sound Pressure Level) Accuracy (TA410)192 Accuracy (TA430, TA440)<sup>162</sup> ±3% of reading or ±0.015 m/s (±3 ft/min), whichever is greater 允许范围 结论 U测量声压级 声压级差的绝对值 Resolution (k-2)(Pass/Fail) (Prescribed SPL) (Measured SPL) (Absolute value of SPL) (Limit) Duct Size (TA430, TA440) (dB) (dB) (dB) Dimensions 0.10 ≤0.40 94 94.29 0.29 Range 3 频率 (Frequency) Temperature Range (TA410, TA430) Range (TA440) 结论 Uset 规定频率 频率误差的绝对值 允许范围 Resolution (k=2) (Prescribed Fre.) (Measured Fre.) (Absolute value of Fre.) (Limit) (Pass/Fail) (%) (%) (Hz) Range ≤1.00 0.10 1000 1002.1 0.21 Accuracy4 Resolution 4 总失真 (Distortion) Range Resolution 規定声压级 规定频率 总失真 允许范围 结论 Utel Dew Point (TA440 only) Range (k-2)(Prescribed SPL) (Measured Fre.) Resolution (%) (%) (dB) ≤3.00 5.0 94 1000 1.34 Operating (Electronics) Model TA410, TA430 Model TA440 以下空白/No data hereafter Operating (Probe) Storage Range 1 second to 1 hour 数据页(Data sheet) ID: 013393 第5页,共5页

#### Catalogue of Air Flow Meter (TSI TA440)

MODELS TA410, TA430 AND TA440

0 to 20 m/s (0 to 4,000 ft/min) 0 to 30 m/s (0 to 6,000 ft/min) ±5% of reading or ±0.025 m/s (±5 ft/min), whichever is greater

0.01 m/s (1 ft/min)

1 to 635 cm in increments of 0.1 cm (1 to 250 inches in increments of 0.1 in.)

#### Volumetric Flow Rate (TA430, TA440)

Actual range is a function of velocity, and duct size

-18 to 93°C (0 to 200°F) -10 to 60°C (14 to 140°F) ±0.3°C (±0.5°F) 0.1°C (0.1°F)

#### Relative Humidity (TA440 only)

5 to 95% RH ±3% RH 0.1% RH

#### Wet Bulb Temperature (TA440 only)

5 to 60°C (40 to 140°F)

-15 to 49°C (5 to 120°F) 0.1°C (0.1°F)

#### Instrument Temperature Range

-18 to 93°C (0 to 200°F) -10 to 60°C (14 to 140°F) -20 to 60°C (-4 to 140°F)

#### Data Storage Capabilities (TA430, TA440)

12,700+ samples and 100 test IDs

5 to 45°C (40 to 113°F)

#### Logging Interval (TA430, TA440)



#### Time Constant (TA430, TA440) User selectable

#### **External Meter Dimensions**

8.4 cm x 17.8 cm x 4.4 cm (3.3 in. x 7.0 in. x 1.8 in.)

Meter Weight with Batteries

0.27 kg (0.6 lbs.)

#### **Meter Probe Dimensions**

Probe Length 101.6 cm (40 in.) Probe Diameter of Tip 7.0 mm (0.28 in.) Probe Diameter of Base 13.0 mm (0.51 in.)

#### **Articulating Probe Dimensions**

Articulating Section Length 19.7 cm (7.8 in.) Diameter of Articulating Knuckle 9.5 mm (0.38 in.)

#### **Power Requirements**

Four AA-size batteries or AC adapter

	TA410	TA430, TA430-A	TA440, TA440-A
Velocity range 0 to 20.00 m/s (0 to 4000 ft/min)	+		
Velocity range 0 to 30.00 m/s (0 to 6000 ft/min)		+	+
Temperature	+	+	*
Flow		+	+
Humidity, wet bulb, dew point			
Probe	Straight	Straight or -A articulated	Straight or -A articulated
Variable time constant		+	+
Manual data logging		+	+
Auto save data logging			+
Statistics		+	141
Review data		+	+
LogDat2 downloading software		+	+
Free Certificate of Calibration	+	+	141

The accuracy statement begins at 30 ft/min through 4000 ft/min (0.15 m/s through 20 m/s) for the Model TA410, and 30 ft/min through 6,000 ft/min (0.15 m/s through 30 m/s) for Models TA430 and TA440.

\*Accuracy with instrument case at 25°C (77°F), add uncertainty of 0.03°C/°C (0.05°F/°F)

for change in instrument temperature.

Accuracy with probe at 25°C (77°F), Add uncertainty of 0.2% RH/°C (0.1% RH/°F) for change in probe temperature. Includes 1% hysteresis.

Airflow Instruments, TSI Instruments Ltd.
Visit our website at www.airflowinstruments.co.uk for more information

UK Tel: +44 149 4 459200 Germany Tel: +49 241 523030 France Tel: +33 491 11 87 64

P/N 2980548 Rev D (A4) ©2014 TSI Incorporated

#### Calibration Certificate of Air Flow Meter AAST-FLOW-03, Gal Cent 2021/2/26 深圳市东华计量检测技术有限公司 CALIBRATION CERTIFICATE 证书编号: DH21AA002160001 Certificate No. 委托方名称: Castco Testing Centre Limited Client name 委托方地址: 33, On Kui Street, Fanling, N.T. Add.of Client 计量器具名称: 风速计 Name of Instrument 型号/规格: TA440 Type/Specification 制造单位: AIRFLOW Manufacturer 器具编号: AAST-FLOW-03/TA4401706003 Serial No. 接收日期: 02 Month 23 校准日期: Date of calibration Year Month 批准人: 签发日期: 2021 年 02 月 26 日 Approved by Date of issue Year Month 张吉庆 核验员: 张吉庆 Checked by (证书专用章) 校准员: Calibrated by 扫码查证书信息 (真伪) 计量校准机构备案号: 粤校备2017B010 Register No: 粤校备2017B010 地址:深圳市龙华区大浪街道同胜社区浦华科技园厂房 Add: 1st Floor, Building A1, Puhua Science and Technology Park, Tongsheng Community, Dalang Street, Longhua District, Shenzhen, Guangdong, China 电话: 0755-28161768/28162768/28166778 Tel: 0755-28161768/28162768/28166778 传真: 0755-21004376 邮编: 518109 Fax: 0755-21004376 Zip Code: 518109 http://www.szdhjl.com E-mail: szdhjl@163.com 第 1 页 . 共 3 页 page



Certificate No.

DH21AA002160001

#### 证书说明

Certificate Statement

- 1、本校准证书包含的数据和信息仅对本次被校准的计量器具负责。 The calibration certificate contains data and information applies only to the calibrated instrument.
- 2、本公司仅对加盖我司的"证书专用章"的完整证书负责。
- The company only Division I stamped "certificate special seal" is responsible for the full certificate. 3、未经本公司书面授权,不得部分复印证书。
- The certificate shall not be photocopied without the written authorization of the company.
- 4、本次校准依据的技术文件:

Reference Documents for the Calibration:

JJG(建设)0001-1992 热球式风速仪计量检定规程

JJG(建设)0001-1992 Metrological Verification Regulation of Hot Ball shaped Anemmeter

5、本次校准所使用的主要计量标准器具: Major standards of measurement used in the calibration:

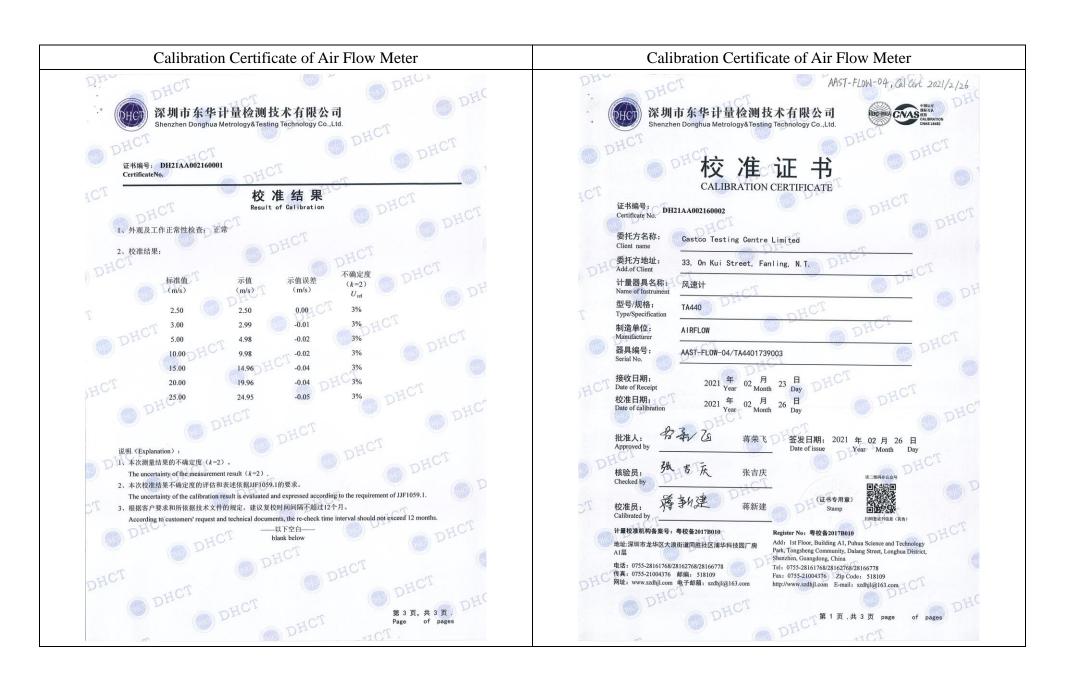
设备名称 Equipment Name	测量范围 Measuring Range	不确定度/准确度等级 /最大允许误差 Uncertainty/AccuracyClass/ Maximum permissible Error	设备编号 Equipment No.	溯源机构/ 证书编号 Traceability to/ Certificate No.	溯源有效期 Traceability Due Date
补偿式微压计	(-2500~2500) Pa	DE ICI	SM1926	上海市计量测试技术研究院 2018E21-20- 2637951001	2022-07-28
皮托管	(0~30) m/s	•	SM326	中国计量科学研究院 RGfv2019-0007	2024-01-20
机械式温湿度计	温度: (-20~80) ℃; 湿度: (0~ 100) %RH	MPE:温度;±2℃,湿 度;± (5~7)%	85926	深圳市计量质量检测研究院 205605616	2021-05-10
空盒气压表	(800~1060)hPa	U=0.6hPa, k=2	15033115	深圳市计量质量检测研 究院 204373348	2021-08-17
标准水银温度计	(0~50)°e C	U=0.03℃, k=2	2-204	深圳市计量质量检测研 究院 205502058	2022-03-09

- 6、校准地点: 本公司力学实验室 Operation Location
- 7、环境条件: Operation Environment

温度 21.7 °C Temperature

相对湿度

1010.0 hPa



#### Calibration Certificate of Air Flow Meter



#### 深圳市东华计量检测技术有限公司

Shenzhen Donghua Metrology&Testing Technology Co.,Ltd.

证书编号: Certificate No.

DH21AA002160002

#### 证书说明

Certificate Statement

1、本校准证书包含的数据和信息仅对本次被校准的计量器具负责。

The calibration certificate contains data and information applies only to the calibrated instrument.

2、本公司仅对加盖我司的"证书专用章"的完整证书负责。

The company only Division I stamped "certificate special seal" is responsible for the full certificate.

3、未经本公司书面授权,不得部分复印证书。

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4、本次校准依据的技术文件:

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5、本次校准所使用的主要计量标准器具:

Major standards of measurement used in the calibration:

设备名称 Equipment Name	测量范围 Measuring Range	不确定度/准确度等级 /最大允许误差 Uncertainty/AccuracyClass/ Maximum permissible Error	设备编号 Equipment No.	溯源机构/ 证书编号 Traceability to/ Certificate No.	溯源有效期 Traceability Due Date
补偿式微压计	(-2500~2500) Pa	=# DE	SM1926	上海市计量测试技术研究院 2018E21-20- 2637951001	2022-07-28
皮托管	(0~30) m/s		SM326	中国计量科学研究院 RGfv2019-0007	2024-01-20
机械式温湿度计	温度: (-20~80) C: 湿度: (0~ 100) %RH	MPE:温度: ±2℃,湿 度:± (5~7)%	85926	深圳市计量质量检测研究院 205605616	2021-05-10
空盒气压表	(800~1060)hPa	U=0.6hPa, k=2	15033115	深圳市计量质量检测研究院 204373348	2021-08-17
标准水银温度计	(0~50)°C	U=0.03°C, k=2	2-204	深圳市计量质量检测研 究院 205502058	2022-03-09

6、校准地点: 本公司力学实验室 Operation Location

7、环境条件: Operation Environment 温度 21.7 C

相对湿度

60 %

大气压 1010.0 hPa

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#### 深圳市东华计量检测技术有限公司 Shenzhen Donghua Metrology&Testing Technology Co.,Ltd.

证书编号: DH21AA002160002 CertificateNo.

#### 校准结果 Result of Calibration

1、外观及工作正常性检查; 正常

2、校准结果:

2				0-
	标准值 (m/s)	示值 (m/s)	示值误差 (m/s)	不确定度 (k=2) U <sub>rel</sub>
	2.50	2.50	0.00 CT	3%
OT	3.00	3.00	0.00	3%
HO,	5.00	4.99	-0.01	3%
	10.00 HO	9.98	-0.02	3%
	15.00	14.96 F	-0.04	3%
	20.00	19.95	-0.05	3%
-	25.00	24.95	-0.05	3%

说明 (Explanation):

1、本次测量结果的不确定度(k=2)。 The uncertainty of the measurement result (k=2).

2、本次校准结果不确定度的评估和表述依据JJF1059.1的要求。

The uncertainty of the calibration result is evaluated and expressed according to the requirement of JJF1059.1.

3、根据客户要求和所依据技术文件的规定,建议复校时间间隔不超过12个月。

According to customers' request and technical documents, the re-check time interval should not exceed 12 months.

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$\label{eq:Appendix K-Noise monitoring results and graphical presentation} Appendix \ K-Noise monitoring results and graphical presentation$

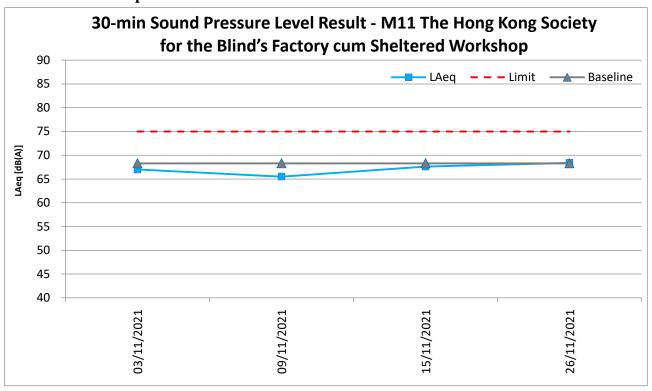
M11 - The Hong Kong Society for the Blind's Factory cum Sheltered Workshop

D (	Temp	XX7 41	Measured Noise Level at M11, dB(A)							
Date (°C)		Weather	Time			Baseline	$\mathcal{L}_{Aeq}$	$L_{A10}$	$L_{A90}$	Limit
03/11/2021	26.3	Sunny	11:12	-	11:42	68.3	67.0	69.9	60.2	75
09/11/2021	23.9	Sunny	13:31	-	14:01	68.3	65.5	67.3	59.2	75
15/11/2021	24.6	Sunny	10:45	-	11:15	68.3	67.6	70.3	61.0	75
26/11/2021	23.2	Sunny	14:54	-	15:24	68.3	68.4	71.4	63.5	75
			Maximum			68.4				
			Minimum			65.5				
			Average				67.2			

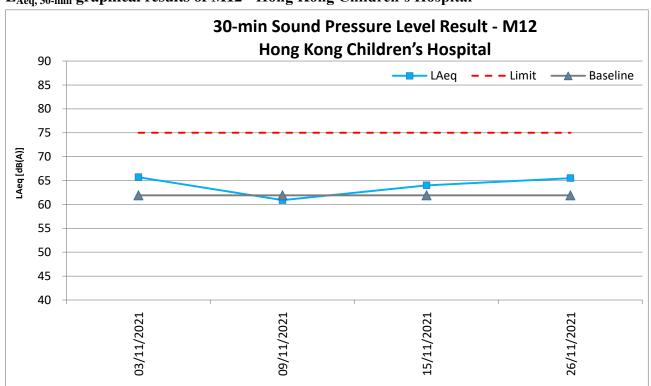
## M12 - Hong Kong Children's Hospital

Tiong Rong Children's Hospital										
-	Temp (°C)	Weather	Measured Noise Level at M12, dB(A)							
Date			Time			Baseline	$L_{Aeq}$	$L_{A10}$	$L_{A90}$	Limit
03/11/2021	26.3	Sunny	14:28	-	14:58	61.9	65.7	67.6	63.3	75
09/11/2021	23.9	Sunny	11:08	-	11:38	61.9	60.9	62.9	58.6	75
15/11/2021	24.6	Sunny	14:22	-	14:52	61.9	64.0	65.8	61.7	75
26/11/2021	23.2	Sunny	9:57	-	10:27	61.9	65.5	67.2	63.1	75
Maximum				65.7						
			Minimum				60.9			
		Average					64.4			

 $L_{\text{Aeq, }30\text{-min}}$  graphical results of M11 - The Hong Kong Society for the Blind's Factory cum Sheltered Workshop



 $L_{\text{Aeq, }30\text{-min}}$  graphical results of M12 - Hong Kong Children's Hospital



# Appendix L – Event and Action Plan for noise

T4				
Event	ET	IEC	Supervisor / ER	Contractor
Action Level being exceeded	<ol> <li>Notify Supervisor / ER, IEC and Contractor;</li> <li>Carry out investigation;</li> <li>Report the results of investigation to the IEC, Supervisor / ER and Contractor;</li> <li>Discuss with the IEC and Contractor on remedial measures required;</li> <li>Increase monitoring frequency to check mitigation effectiveness.</li> <li>(The above actions should be taken within 2 working days after the exceedance is</li> </ol>	results submitted by the ET;	<ol> <li>Confirm receipt of notification of failure in writing;</li> <li>Notify Contractor;</li> <li>In consolidation with the IEC, agree with the Contractor on the remedial measures to be implemented;</li> <li>Supervise the implementation of remedial measures.</li> <li>(The above actions should be taken within 2 working days after the exceedance is identified.)</li> </ol>	Submit noise mitigation proposal to IEC and Supervisor / ER;      Implement noise mitigation proposals.  (The above actions should be taken within 2 working days after the exceedance is identified.)
Limit Level being exceeded	identified.)  1. Inform IEC, Supervisor /ER, Contractor and EPD;  2. Repeat measurement to confirm findings;  3. Increase monitoring frequency;  4. Identify source and investigate the cause of exceedance;  5. Carry out analysis of Contract's working procedure;  6. Discuss remedial measures required with the IEC, Contractor and Supervisor /ER;  7. Assess effectiveness of	1. Discuss the potential remedial actions with Supervisor /ER, ET and Contractor;  2. Review Contractor's remedial actions whenever necessary to assure their effectiveness and advise the Supervisor /ER accordingly.  (The above actions should be taken within 2 working days after the exceedance is identified.)	Confirm receipt of notification of failure in writing;     Notify Contractor;     In consolidation with the IEC, agree with the Contractor on the remedial measures to be implemented;     Supervise the implementation of remedial measures;     If exceedance continues, consider stopping the Contractor to continue working on that portion of work which causes the	<ol> <li>Take immediate action to avoid further exceedance;</li> <li>Submit proposals for remedial actions to IEC and Supervisor /ER within 3 working days of notification;</li> <li>Implement the agreed proposal;</li> <li>Submit further proposal if problem still not under control;</li> <li>Stop the relevant portion of works as instructed by the Supervisor /ER until the exceedance is abated.</li> <li>(The above actions should be</li> </ol>

Event	Action									
Event	ET	IEC	Supervisor / ER	Contractor						
	Contractor's remedial		exceedance until the	taken within 2 working days						
	actions and keep IEC,		exceedance is abated.	after the exceedance is						
	EPD, and Supervisor /ER		(The above actions should be	identified.)						
	informed of the results;		taken within 2 working days after							
	8. If exceedance stops, cease		the exceedance is identified.)							
	additional monitoring.									
	(The above actions should be									
	taken within 2 working days									
	after the exceedance is									
	identified.)									

Appendix M – Event and Action Plan for Landscape and Visual Impact

Event		Act	ion	
Event	ET	IEC	Supervisor / ER	Contractor
Design Check	1. Check final design conforms to the requirements of EP and prepare report.	2. Recommend remedial	Undertake remedial design if necessary.	
Non-conformity on one occasion	<ol> <li>Identify Source.</li> <li>Inform IEC and Supervisor /ER.</li> <li>Discuss remedial actions with IEC, Supervisor /ER and Contractor.</li> <li>Monitor remedial actions until rectification has been completed.</li> </ol>	working method.  3. Discuss with ET and Contractor on possible remedial measures.	<ol> <li>Notify Contractor.</li> <li>Ensure remedial measures are properly implemented.</li> </ol>	Amend working methods.     Rectify damage and undertake any necessary replacement.
Repeated Non-conformity	<ol> <li>Identify Source.</li> <li>Inform IEC and Supervisor /ER.</li> <li>Increase monitoring frequency.</li> <li>Discuss remedial actions with IEC, Supervisor /ER and Contractor.</li> <li>Monitor remedial actions until rectification has been completed.</li> <li>If non-conformity stops, cease additional monitoring.</li> </ol>	method.  3. Discuss with ET and Contractor on possible remedial measures.  4. Advise Supervisor /ER on effectiveness of proposed remedial measures.	<ol> <li>Notify Contractor.</li> <li>Ensure remedial measures are properly implemented.</li> </ol>	Amend working methods.     Rectify damage and undertake any necessary replacement.

## Appendix N – Waste Flow Table



## Appendix F - Monthly Summary Waste Flow Table

Name of Department: CEDD Contract No.: <u>ED/2018/01</u>

## Monthly Summary Waste Flow Table for November 2021

	Ac	tual Quantitie	s of Inert C&D	Materials Gener	ated Monthl	у	Act	tual Quantities o	f C&D Wastes G	Senerated Mon	thly
Month	Total Quantity Generated	Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper / cardboard packaging	Plastics (see Note 3)	Chemical Waste	Others, e.g. general refuse
	(in '000m³)	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m³)	(in '000m³)	(in '000 kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000m <sup>3</sup> )
Jan	9.107	0.177		7.885	1.045	-	-			<del></del>	0.091
Feb	5.637	0.127	1.660	2.261	1.589						0.106
Mar	4.780		2.580		1.530	0.670					0.101
Apr	4.320		1.350		2.970						0.120
May	12.813		1.225	9.693	1.895						0.138
Jun	10.791		0.680	9.411	0.700						0.140
Sub-total	47.448	0.304	7.495	29.25	9.729	0.670					0.696
July	0.474			0.255	0.219			10- <u>60-</u>			0.119
Aug	1.81			0.435	1.375						0.174
Sep	9.707	1.673	2.573	4.702	0.431	0.328					0.128
Oct	3.441		0.380	2.150	0.911						0.169
Nov	3.390			2.831	0.559						0.196
Dec											
Total	66.27	1.977	10.448	39.623	13.224	0.998		<u> </u>		( <del></del>	1.482

	Forecast of Total Quantities of C&D Materials to be Generated from the Contract*											
Total Quantity Generated	Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper / cardboard packaging	Plastics (see Note 3)	Chemical Waste	Others, e.g. general refuse		
(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000 kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000m <sup>3</sup> )		
195.01	2.103	10.2	140	19.81	25	200	0.8	-		3.4		

Notes: (1) The performance targets are given in ER Appendix 8I Clause 14 and the EM&A Manual

(2) The waste flow table shall also include C&D materials to be imported for use at the Site

(3) Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging material

(4) The Contractor shall also submit the latest forecast of the total amount of C&D materials expected to be generated from the works, together with a breakdown of the nature where

Appendix O – Environmental Mitigation Implementation Schedule (EMIS)

Implementatio	n Schedule for A	Air Quality Measures	
EIA for KTD Development Ref.	EIA for KTD - Roads D3A & D4A Ref.	Environmental Protection Measures / Mitigation Measures	Status
S3.2		8 times daily watering of the work site with active dust emitting	۸
		activities.	
S3.2	S4.8	Implementation of dust suppression measures stipulated in Air	۸
		Pollution Control (Construction Dust) Regulation. The following	
		mitigation measures, good site practices and a comprehensive dust	
		monitoring and audit programme are recommended to minimize	
		cumulative dust impacts.	
		- Stockpiling site(s) should be lined with impermeable sheeting	٨
		and bunded. Stockpiles should be fully covered by	
		impermeable sheeting to reduce dust emission.	
		- Misting for the dusty material should be carried out before	٨
		being loaded into the vehicle.	
		- Any vehicle with an open load carrying area should have	۸
		properly fitted side and tail boards.	
		- Material having the potential to create dust should not be loaded	۸
		from a level higher than the side and tail boards and should be	
		dampened and covered by a clean tarpaulin.	
		- The tarpaulin should be properly secured and should extent at	٨
		least 300 mm over the edges of the sides and tailboards. The	
		material should also be dampened if necessary, before	
		transportation.	
		- The vehicles should be restricted to maximum speed of 10 km	٨
		per hour and confined haulage and delivery vehicle to	
		designated roadways insider the site. On- site unpaved roads	
		should be compacted and kept free of lose materials.	
		- Vehicle washing facilities should be provided at every vehicle	٨
		exit point.	
		- The area where vehicle washing takes place and the section of	٨
		the road between the washing facilities and the exit point should	
		be paved with concrete, bituminous materials or hardcores.	
		- Every main haul road should be scaled with concrete and kept	۸*
		clear of dusty materials or sprayed with water so as to	
		maintain the entire road surface wet.	
		- Every stock of more than 20 bags of cement should be covered	۸
		entirely by impervious sheeting placed in an area sheltered on	
		the top and the three sides.	
		- Every vehicle should be washed to remove any dusty materials	۸
		from its body and wheels before leaving the construction sites.	

		Noise Measures	
EIA for KTD Development Ref.	EIA for KTD - Roads D3A & D4A Ref.	Environmental Protection Measures / Mitigation Measures	Status
S3.3		Use of quiet PME, movable barriers for Asphalt Paver, Breaker,	٨
		Excavator and Hand-held breaker and full enclosure for Air	
		Compressor, Bar Bender, Concrete Pump, Generator and Water	
		Pump.	
S3.3		Good Site Practice:	
S3.3		- Only well-maintained plant should be operated on-site and	۸*
		plant should be serviced regularly during the construction	
		program.	
		- Silencers or mufflers on construction equipment should be	٨
		utilized and should be properly maintained during the	
		construction program.	
		- Mobile plant, if any, should be sited as far away from NSRs as	٨
		possible.	
		- Machines and plant (such as trucks) that may be in intermittent	٨
		use should be shut down between works periods or should be	
		throttled down to a minimum.	
		- Plant known to emit noise strongly in one direction should,	٨
		wherever possible, be orientated so that the noise is directed	
		away from the nearby NSRs.	
		- Material stockpiles and other structures should be effectively	٨
		utilized, wherever practicable, in screening noise from on-site	
		construction activities.	
		- Scheduling of Construction Works during School	N/A
		Examination Period	

Implementatio	Implementation Schedule for Water Quality Measures						
EIA for KTD Development Ref.	EIA for KTD - Roads D3A & D4A Ref.	Environmental Protection Measures / Mitigation Measures	Status				
S3.4		Construction Runoff  Exposed soil areas should be minimised to reduce the potential for increased siltation, contamination of runoff, and erosion.  Construction runoff related impacts associated with the above ground construction activities can be readily controlled through the use of appropriate mitigation measures which include:	^				
S3.4		- use of sediment traps.	۸				
S3.4		- adequate maintenance of drainage systems to prevent flooding and overflow.	۸				

EIA for KTD Development Ref.	EIA for KTD – Roads D3A & D4A Ref.		<b>Environmental Protection Measures / Mitigation Measures</b>	Status
	S5.8	-	Surface run-off from construction sites should be discharged	٨
			into storm drains via adequately designed sand/silt removal	
			facilities such as sand traps, silt traps and sedimentation basins.	
	S5.8	-	Channels or earth bunds or sand bag barriers should be provided	۸
			on site to properly direct stormwater to such silt removal	
			facilities. Perimeter channels should be provided on site	
			boundaries where necessary to intercept storm run-off from	
			outside the site so that it will not wash across the site. Catchpits	
			and perimeter channels should be constructed in advance of site	
			formation works and earthworks.	
	S5.8	-	Silt removal facilities, channels and manholes should be	۸
			maintained and the deposited silt and grit should be removed	
			regularly, at the onset of and after each rainstorm to prevent	
			local flooding. Any practical options for the diversion and	
			re-alignment of drainage should comply with both engineering	
			and environmental requirements in order to provide adequate	
			hydraulic capacity of all drains. Minimum distance of 100 m	
			should be maintained between the discharge points of	
			construction site run-off and the existing saltwater intakes.	
	S5.8	-	Earthworks final surfaces should be well compacted and the	۸
			subsequent permanent work or surface protection should be	
			carried out immediately after the final surfaces are formed to	
			prevent erosion caused by rainstorms. Appropriate drainage like	
			intercepting channels should be provided where necessary.	
	S5.8	-	Measures should be taken to minimize the ingress of rainwater	۸
			into trenches. If excavation of trenches in wet seasons is	
			necessary, they should be dug and backfilled in short sections.	
			Rainwater pumped out from trenches or foundation excavations	
			should be discharged into storm drains via silt removal facilities.	
	S5.8	-	Open stockpiles of construction materials (e.g. aggregates,	۸
			sand and fill material) on sites should be covered with tarpaulin	
			or similar fabric during rainstorms.	
	S5.8	-	Manholes (including newly constructed ones) should always be	٨
			adequately covered and temporarily sealed so as to prevent silt,	
			construction materials or debris from getting into the drainage	
			system, and to prevent storm run-off from getting into foul	
			sewers. Discharge of surface run-off into foul sewers must	
			always be prevented in order not to unduly overload the foul	

EIA for KTD Development Ref.	EIA for KTD - Roads D3A & D4A Ref.	Environmental Protection Measures / Mitigation Measures	Status
		sewerage system.	
	S5.8	- Good site practices should be adopted to remove rubbish and	٨
		litter from construction sites so as to prevent the rubbish and	
		litter from spreading from the site area. It is recommended to	
		clean the construction sites on a regular basis.	
S3.4		Construction site should be provided with adequately designed	۸
		perimeter channel and pre-treatment facilities and proper	
		maintenance. The boundaries of critical areas of earthworks should	
		be marked and surrounded by dykes or embankments for flood	
		protection. Temporary ditches should be provided to facilitate runoff	
		discharge into the appropriate watercourses, via a silt retention pond.	
		Permanent drainage channels should incorporate sediment basins or	
		traps and baffles to enhance deposition rates. The design of efficient	
		silt removal facilities should be based on the guidelines in Appendix	
		A1 of ProPECC PN 1/94.	
S3.4	S5.8	Ideally, construction works should be programmed to minimise	^
		surface excavation works during the rainy season (April to	
		September). All exposed earth areas should be completed as soon as	
		possible after earthworks have been completed, or alternatively,	
		within 14 days of the cessation of earthworks where practicable.	
		If excavation of soil cannot be avoided during the rainy season, or at	
		any time of year when rainstorms are likely, exposed slope surfaces	
		should be covered by tarpaulin or other means.	
		If excavation in soil cannot be avoided in these months or at any	
		time of year when rainstorms are likely, for the purpose of	
		preventing soil erosion, temporary exposed slope surfaces should be	
		covered e.g. by tarpaulin, and temporary access roads should be	
		protected by crushed stone or gravel, as excavation proceeds.	
		Intercepting channels should be provided (e.g. along the crest / edge	
		of excavation) to prevent storm runoff from washing across exposed	
		soil surfaces. Arrangements should always be in place in such a way	
		that adequate surface protection measures can be safely carried out	
		well before the arrival of a rainstorm.	
S3.4		Sediment tanks of sufficient capacity, constructed from pre-formed	٨
		individual cells of approximately 6 to 8 m <sup>3</sup> capacity, are	
		recommended as a general mitigation measure which can be used	
		for settling surface runoff prior to disposal. The system capacity is	
		flexible and able to handle multiple inputs from a variety of sources	

	Implementation Schedule for Water Quality Measures					
EIA for KTD Development Ref.	EIA for KTD - Roads D3A & D4A Ref.	Environmental Protection Measures / Mitigation Measures	Status			
		and particularly suited to applications where the influent is pumped.				
S3.4		Open stockpiles of construction materials (for examples, aggregates,	۸			
		sand and fill material) of more than 50 m <sup>3</sup> should be covered with				
		tarpaulin or similar fabric during rainstorms. Measures should be				
		taken to prevent the washing away of construction materials, soil,				
		silt or debris into any drainage system.				
S3.4		Manholes (including newly constructed ones) should always be	٨			
		adequately covered and temporarily sealed so as to prevent silt,				
		construction materials or debris being washed into the drainage				
		system and storm runoff being directed into foul sewers.				
S3.4		Precautions to be taken at any time of year when rainstorms are	٨			
		likely, actions to be taken when a rainstorm is imminent or forecast,				
		and actions to be taken during or after rainstorms are summarised in				
		Appendix A2 of ProPECC PN 1/94. Particular attention should be				
		paid to the control of silty surface runoff during storm events.				
S3.4		Oil interceptors should be provided in the drainage system and	NA			
		regularly cleaned to prevent the release of oils and grease into the				
		storm water drainage system after accidental spillages. The				
		interceptor should have a bypass to prevent flushing during periods				
		of heavy rain.				
S3.4	S5.8	Wheel Washing Water	٨			
		All vehicles and plant should be cleaned before leaving a				
		construction site to ensure no earth, mud, debris and the like is				
		deposited by them on roads. An adequately designed and located				
		wheel washing bay should be provided at every site exit, and				
		wash-water should have sand and silt settled out and removed at				
		least on a weekly basis to ensure the continued efficiency of the				
		process. The section of access road leading to, and exiting from, the				
		wheel-wash bay to the public road should be paved with sufficient				
		backfall toward the wheel-wash bay to prevent vehicle tracking of				
		soil and silty water to public roads and drains.				
S3.4		<u>Drainage</u>	٨			
		It is recommended that on-site drainage system should be installed				
		prior to the commencement of other construction activities.				
		Sediment traps should be installed in order to minimise the sediment				
		loading of the effluent prior to discharge into foul sewers. There				
		should be no direct discharge of effluent from the site into the sea.				
S3.4		All temporary and permanent drainage pipes and culverts provided	٨			

Implementation	on Schedule for	Water Quality Measures	
EIA for KTD Development Ref.	EIA for KTD - Roads D3A & D4A Ref.	Environmental Protection Measures / Mitigation Measures	Status
		to facilitate runoff discharge should be adequately designed for the	
		controlled release of storm flows. All sediment control measures	
		should be regularly inspected and maintained to ensure proper and	
		efficient operation at all times and particularly following rain	
		storms. The temporarily diverted drainage should be reinstated to its	
		original condition when the construction work has finished or the	
		temporary diversion is no longer required.	
S3.4		All fuel tanks and storage areas should be provided with locks and	٨
		be located on sealed areas, within bunds of a capacity equal to 110%	
		of the storage capacity of the largest tank, to prevent spilled fuel oils	
		from reaching the coastal waters of the Victoria Harbour WCZ.	
S3.4	S5.8	Sewage Effluent	٨
		Construction work force sewage discharges on site are expected to	
		be connected to the existing trunk sewer or sewage treatment	
		facilities. The construction sewage may need to be handled by	
		portable chemical toilets prior to the commission of the on-site	
		sewer system. Appropriate numbers of portable toilets should be	
		provided by a licensed contractor to serve the large number of	
		construction workers over the construction site. The Contractor	
		should also be responsible for waste disposal and maintenance	
		practices.	
		Notices should be posted at conspicuous locations to remind the	
		workers not to discharge any sewage or wastewater into the	
		surrounding environment. Regular environmental audit of the	
		construction site will provide an effective control of any	
		malpractices and can encourage continual improvement of	
		environmental performance on site. It is anticipated that sewage	
		generation during the construction phase of the project would not	
		cause water pollution problem after undertaking all required	
		measures.	
S3.4		Stormwater Discharges	٨
33.4		Minimum distances of 100 m should be maintained between the	
		existing or planned stormwater discharges and the existing or	
S2 /		planned seawater intakes  Debris and Litter	٨
S3.4		Debris and Litter  In order to maintain water quality in accontable conditions with	.`
		In order to maintain water quality in acceptable conditions with	
		regard to aesthetic quality, contractors should be required, under	
		conditions of contract, to ensure that site management is optimised	

EIA for KTD Development Ref.	EIA for KTD - Roads D3A & D4A Ref.	03A					
		and that disposal of any solid materials, litter or wastes to marine					
		waters does not occur.					
	S5.8	Boring and Drilling Water	٨				
		Water used in ground boring and drilling for site investigation or					
		rock / soil anchoring should as far as practicable be re-circulated					
		after sedimentation. When there is a need for final disposal, the					
		wastewater should be discharged into storm drains via silt removal					
		facilities.					
	S5.8	Acid Cleaning, Etching and Pickling Wastewater	NA				
		Acidic wastewater generated from acid cleaning, etching, pickling					
		and similar activities should be neutralized to within the pH range					
		of 6 to 10 before discharging into					
		foul sewers.					
	S5.8	Effluent Discharge	٨				
		There is a need to apply to EPD for a discharge licence for discharge					
		of effluent from the construction site under the WPCO. The					
		discharge quality must meet the requirements specified in the					
		discharge licence. All the runoff and wastewater generated from the					
		works areas should be treated so that it satisfies all the standards					
		listed in the TM-DSS. Minimum distance of 100 m should be					
		maintained between the discharge points of construction site effluent					
		and the existing seawater intakes and the planned WSR mentioned in					
		S5.3.1 as appropriate. The beneficial uses of the treated effluent for					
		other on-site activities such as dust suppression, wheel washing and					
		general cleaning etc., can minimise water consumption and reduce					
		the effluent discharge volume. If monitoring of the treated					
		effluent quality from the works areas is required during the					
		construction phase of the Project, the monitoring should be carried					
		out in accordance with the relevant WPCO licence which is under					
		the ambit of regional office (RO) of EPD.					
	05.0	-	^				
	S5.8	Accidental Spillage  Contractor must register as a chamical wester producer if chamical					
		Contractor must register as a chemical waste producer if chemical					
		wastes would be produced from the construction activities. The					
		Waste Disposal Ordinance (Cap 354) and its subsidiary regulations					
		in particular the Waste Disposal (Chemical Waste) (General)					
		Regulation, should be observed and complied with for control of					
		chemical wastes.					
		Any service shop and maintenance facilities should be located on					

Implementation Schedule for Water Quality Measures					
EIA for KTD Development Ref.  EIA for KTD - Roads D3A & D4A Ref.		Environmental Protection Measures / Mitigation Measures	Status		
		hard standings within a bunded area, and sumps and oil interceptors			
	should be provided. Maintenance of vehicles and equipme				
	involving activities with potential for leakage and spillage should				
		only be undertaken within the areas appropriately equipped to			
		control these discharges.			
	S5.8	Disposal of chemical wastes should be carried out in compliance	۸		
		with the Waste Disposal Ordinance. The Code of Practice on the			
		Packaging, Labelling and Storage of Chemical Wastes published			
		under the Waste Disposal Ordinance details the requirements to deal			
		with chemical wastes. General requirements are given as follows:			
		- Suitable containers should be used to hold the chemical wastes			
		to avoid leakage or spillage during storage, handling and			
		transport.			
	S5.8	- Chemical waste containers should be suitably labelled, to notify	٨		
		and warn the personnel who are handling the wastes, to avoid			
		accidents.			
	S5.8	- Storage area should be selected at a safe location on site and	٨		
		adequate space should be allocated to the storage area.			

Implementation	Implementation Schedule for Waste Management Measures					
EIA for KTD Development Ref.	EIA for KTD - Roads D3A & D4A Ref.	Environmental Protection Measures / Mitigation Measures Sta				
S3.5		Good Site Practices  It is not anticipated that adverse waste management related impacts would arise, provided that good site practices are adhered to.  Recommendations for good site practices during construction activities include:				
S3.5		- Nomination of an approved person, such as a site manager, to be responsible for good site practices, arrangements for collection and effective disposal to an appropriate facility, of all wastes generated at the site.	۸			
	S6.7	- Prepare a Waste Management Plan, which becomes a part of the Environmental Management Plan, in accordance with the requirements stipulated in ETWB TC(W) No. 19/2005, approved by the Engineer/Supervising Officer of the Project based on current practices on construction sites.	۸			
S3.5	S6.7	- Training of site personnel in proper waste management and chemical waste handling procedures.				

Implementation Schedule for Waste Management Measures  EIA for KTD   EIA for KTD   Environmental Protection Measures / Mitigation Measures   Status				
Development Rf. & D4A Ref.		Environmental Protection Weasures / Wildgation Weasures	Status	
S3.5	S6.7	- Provision of sufficient waste disposal points and regular	^*	
		collection for disposal.		
S3.5	S6.7	- Appropriate measures to minimise windblown litter and dust	۸	
		during transportation of waste by either covering trucks or by		
		transporting wastes in enclosed containers.		
S3.5		- A recording system for the amount of wastes generated, ^		
		recycled and disposed of (including the disposal sites).		
	S6.7	- Regular cleaning and maintenance programme for drainage	۸	
		systems, sumps and oil interceptors.		
	S6.7	- Training should be provided to workers about the concepts of	۸	
		site cleanliness and appropriate waste management procedures,		
		including waste reduction, reuse and recycle.		
S3.5		Waste Reduction Measures	٨	
		Good management and control can prevent the generation of a		
		significant amount of waste. Waste reduction is best achieved at the		
		planning and design stage, as well as by ensuring the		
		implementation of good site practices. Recommendations to achieve		
		waste reduction include:		
S3.5	S6.7	- Sort C&D waste from demolition of the remaining structures to	NA	
		recover recyclable portions such as metals.		
S3.5	S6.7	- Segregation and storage of different types of waste in different	٨	
		containers, skips or stockpiles to enhance reuse or recycling of		
		materials and their proper disposal.		
S3.5	S6.7	- Encourage collection of aluminium cans, PET bottles and paper	۸	
		by providing separate labelled bins to enable these wastes to be		
		segregated from other general refuse generated by the work		
		force.		
S3.5		- Any unused chemicals or those with remaining functional	۸	
		capacity should be recycled.		
S3.5	S6.7	- Proper storage and site practices to minimise the potential for	٨	
		damage or contamination of construction materials.		
S3.5		Construction and Demolition Materials		
		Mitigation measures and good site practices should be incorporated		
		in the contract document to control potential environmental impact		
		from handling and transportation of C&D material. The mitigation		
		measures include:		
S3.5		- Where it is unavoidable to have transient stockpiles of C&D	^	
		material within the Project work site pending collection for		

EIA for KTD Development Roads D3A Ref. Environmental Protection Measures / Mitigation Measures / Mitigation Measures		Status	
		disposal, the transient stockpiles shall be located away from	
		waterfront or storm drains as far as possible.	
S3.5		- Open stockpiles of construction materials or construction	۸
		wastes on-site should be covered with tarpaulin or similar	
		fabric.	
S3.5		- Skip hoist for material transport should be totally enclosed by	۸
		impervious sheeting.	
S3.5		- Every vehicle should be washed to remove any dusty materials	۸
		from its body and wheels before leaving a construction site.	
S3.5		- The area where vehicle washing takes place and the section of	۸
		the road between the washing facilities and the exit point should	
		be paved with concrete, bituminous materials or hardcores.	
S3.5		- The load of dusty materials carried by vehicle leaving a	۸
		construction site should be covered entirely by clean	
		impervious sheeting to ensure dust materials do not leak from	
		the vehicle.	
S3.5		- All dusty materials should be sprayed with water prior to any	٨
		loading, unloading or transfer operation so as to maintain the	
		dusty materials wet.	
S3.5		- The height from which excavated materials are dropped should	٨
		be controlled to a minimum practical height to limit fugitive	
		dust generation from unloading.	
S3.5		- When delivering inert C&D material to public fill reception	٨
		facilities, the material should consist entirely of inert	
		construction waste and of size less than 250mm or other sizes	
		as agreed with the Secretary of the Public Fill Committee. In	
		order to monitor the disposal of the surplus C&D material at	
		the designed public fill reception facility and to control fly	
		tipping, a trip-ticket system as stipulated in the ETWB TCW	
		No. 31/2004 "Trip Ticket System for Disposal of Construction	
		and Demolition Materials" should be included as one of the	
		contractual requirements and implemented by an	
		Environmental Team undertaking the Environmental	
		Monitoring and Audit work. An Independent Environmental	
		Checker should be responsible for auditing the results of the	
		system.	
	S6.7	- Plan and stock construction materials carefully to minimize	٨
		amount of waste generated and avoid unnecessary generation	

Implementation Schedule for Waste Management Measures					
EIA for KTD Development Ref.	EIA for KTD - Roads D3A & D4A Ref.	Environmental Protection Measures / Mitigation Measures	Status		
		of waste.			
S3.5		Chemical Waste	٨		
		After use, chemical wastes (for example, cleaning fluids, solvents,			
		lubrication oil and fuel) should be handled according to the Code of			
		Practice on the Packaging, Labelling and Storage of Chemical			
		Wastes. Spent chemicals should be collected by a licensed collector			
		for disposal at the CWTF or other licensed facility, in accordance			
		with the Waste Disposal (Chemical Waste) (General) Regulation.			
	S6.7	Separation of chemical wastes for special handling and appropriate	۸		
		treatment.			
General Refuse  General Refuse		۸			
		General refuse should be stored in enclosed bins or compaction units			
		separate from C&D material. A licensed waste collector should be			
		employed by the contractor to remove general refuse from the site,			
		separately from C&D material. Effective collection and storage			
		methods (including enclosed and covered area) of site wastes would			
		be required to prevent waste materials from being blown around by			
		wind, wastewater discharge by flushing or leaching into the marine			
		environment, or creating odour nuisance or pest and vermin			
		problem.			

Implementation Schedule for Landscape and Visual Measures					
EIA for KTD Development Ref.	EIA for KTD - Roads D3A & D4A Ref.	Environmental Protection Measures / Mitigation Measures	Status		
S3.8.12		All existing trees should be carefully protected during construction.	٨		
S3.8.12		Trees unavoidably affected by the works should be transplanted where practical. Detailed transplanting proposal will be submitted to relevant government departments for approval in accordance with ETWBC 2/2004 and 3/2006. Final locations of transplanted trees should be agreed prior to commencement of the work.	NA		
S3.8.12		Control of night-time lighting.			
S3.8.12		Erection of decorative screen hoarding. ^			
	S7.9	Construction Site Control  - CM1 - Minimized construction area and contractor's temporary works areas.	^		
		- CM2- Control of night-time lighting and glare by hooding all lights.	۸		
		- CM3 - Erection of decorative mesh screens or construction	٨		

Implementation Schedule for Landscape and Visual Measures					
EIA for KTD Development Ref.	EIA for KTD - Roads D3A & D4A Ref.	Status			
		hoardings around works areas in visually unobtrusive colours.			
		- CM4 - Reduction of construction period to practical minimum.	۸		
	- CM5 - Limitation of / Ensuring no run-off into surrounding landscape and adjacent seawater areas.		۸		
		along the temporary access roads to the Cruise Terminal until	NA		

Remarks:			
^	Compliance of mitigation measure.	X	Non-compliance of mitigation measure.
N/A	Not Applicable at this stage.	•	Non-compliance but rectified by the contractor.
N/A(1)	Not observed.		
*	Recommendation was made during site audit	#	Recommendation was made during audit and to be
	but improved/rectified by the contractor.		improved/ rectified by the contractor.

## Mitigation Measures undertaken by the Contractor for site inspections





Date:	04 November 2021	Da
Mitigation Measures:	The open stockpiles of	
	construction materials	
	on sites were covered.	

Date: 04 November 2021

Mitigation Measures: Haul road was sprayed with water to maintain the entire road surface wet.





Date:	18 November 2021	Date:	25 November 2021
Mitigation Measures:	Silt curtains have been	Mitigation Measures:	Quiet PME was used.
	deployed around the		
	close grab dredger to		
	prevent the release of		
	sediments.		

Appendix P – Summaries of Environmental Complaint, Warning, Summon and Notification of Successful Prosecution

**Reporting Month: November 2021** 

Cumulative Statistics on Complaints, Notification of Summons and Successful Prosecutions

upto reporting month

Contract No.	Record of Complaint	Record of Warning	Notification of Summons and Successful Prosecutions
ED/2018/01	2	0	0

Complaint	Log for ED/2018/01			
Complaint Ref. No.	Date of Complaint	Description of Complaint	Investigation / Recommendations / Actions	Close-Out Date / Status
C0001	A dust complaint was referred from the Contractor on 21 October 2020 regarding a pubic complaint via 1823 hotline (Case no. 3-6518939602) on 20 October 2020.	<ol> <li>The water spraying system was not operated in proper time.</li> <li>Stockpile was not covered properly.</li> <li>Haul road was not wetted.</li> <li>Materials transported on trucks were not provided with mechanical covers.</li> </ol>	1. Based on the information provided by the Contractor on 22 October 2020, the water sprinklers system was sprayed every 15	- Closed-out on 5 Nov 2020 - No further complaint was received.

Complaint Complaint Ref. No.	Date of Complaint	Description of Complaint	Investigation / Recommendations / Actions	Close-Out Date / Status
C0002	A dust complaint was	Complaint of dust problem at the payament of Muk	As per the Contractor, the water sprinkler are now adjusted to start at 8:00am and end at 6:00pm for Monday to Saturday while from 8:00am to 5:00pm on Sunday. Water spraying are set with 5-minute time interval with duration 30-60 seconds.	Closed out
C0002	A dust complaint was referred from the Contractor on 8 September 2021 through E-Mail regarding a complaint received by EPD (EPD ref.: K19/RE/00021205-21) on 7 September 2021.	Complaint of dust problem at the pavement of Muk Tai Street near Sports Park.	Investigation As per contractor, part of the complaint area was within the site boundary of the project.  - Manual water spraying was provided.  - The exposed surface and stockpile areas were covered by the impermeable tarpaulin sheet.  Recommendations There was no direct evidence showing that the dust nuisance was caused by the contractor at the complaint area, however the contractor is recommended to implement the following measures to minimize the impact for air quality:  1. Ensure stockpiling sites should be lined with impermeable sheeting and bunded.  2. Stockpiles should be fully covered by impermeable sheeting at all time except during working process.  3. Ensure the work fulfill the relevant statutory requirements on control of air pollution.  4. Take necessary measures to minimize the environmental nuisance arising from the construction site.  Action taken The exposed surface and stockpile area was covered by the impermeable tarpaulin sheet.	- Closed-out on 4 Oct 2021 - No further complaint was received.